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N.C. Dept. of EHNR
SEP 04 1992

Winston-Salem
P.O. Box 510, Hwy 705 E
Seagrove, NC 27342-0510
(919) 873-7211

Luck's® Inc.

Heat and Eat Country Style™ Foods

Winston-Salem
Regional Office
P.O. Box 510, Hwy 705 E
Seagrove, NC 27342-0510
(919) 873-7211

September 3, 1992

Ms. Sherri V. Knight
Regional Groundwater Supervisor
State of North Carolina
Division of Environmental Management
8025 North Point Blvd.
Winston-Salem, NC 27106

RE: Soil Sampling - 1990 UST Closure - McLaren Hart Report

Dear Ms. Knight:

The attached report is the soil samplings results from sampling activities conducted on July 7th and 8th, 1992 by McLaren/Hart at the Luck's, Inc. facility in Seagrove, NC. The report contains background information, site investigations, information on the current investigation and conclusions/recommendations.

Data from this sampling continues to support Luck's knowledge that the tanks had not leaked and any oil and grease detected by sampling methods 9071 and 9073 are not from the tanks or their removal since no detectable levels of petroleum hydrocarbons have been found.

I am enclosing six pictures of the three #5 fuel oil tanks and the ground under each of these tanks that clearly show no evidence of oil leakage.

I trust this will be helpful.

Sincerely,

Darius Luck

Darius Luck
Vice-President/
Plant Manager

DL/jk

Attachment

cc: C. Elmendorf - McLaren Hart
G. Belardo - NYO
T. Anderson
B. McKenzie

UNDERGROUND STORAGE TANK CLOSURE REPORT

LUCKS, INC., SEAGROVE, N.C.

I. Background:

Three underground storage tanks (USTs), including two 10,000 gallon USTs and one 8,000 gallon UST, formerly used to store No. 5 fuel oil were removed by Luck's Incorporated during April 25 and 26, 1990. The USTs were excavated from an area measuring approximately 30 feet by 30 feet, to a depth of approximately 20 feet. The tanks were excavated and disposed of in accordance with applicable state and federal regulations. The tank excavation area is shown on the site map in Figure 1.

There was no visual evidence of free product observed in the tank excavation. Additionally, there was no evidence of fuel oil odor from the soils in the excavation. Based on verbal accounts from facility personnel, the USTs were in good condition and did not appear to be leaking when they were removed. Post-excavation samples were collected from the base of the excavation in August 1990 and analyzed. The excavation was then backfilled with clean soil.

This report summarizes earlier investigations of the UST area, and describes the results of recent resampling of soils in this area, which was conducted in July 1992 by McLaren/Hart in order to satisfy the requirements of the North Carolina Department of Environmental Health and Natural Resources (NCDEHNR) for tank closure.

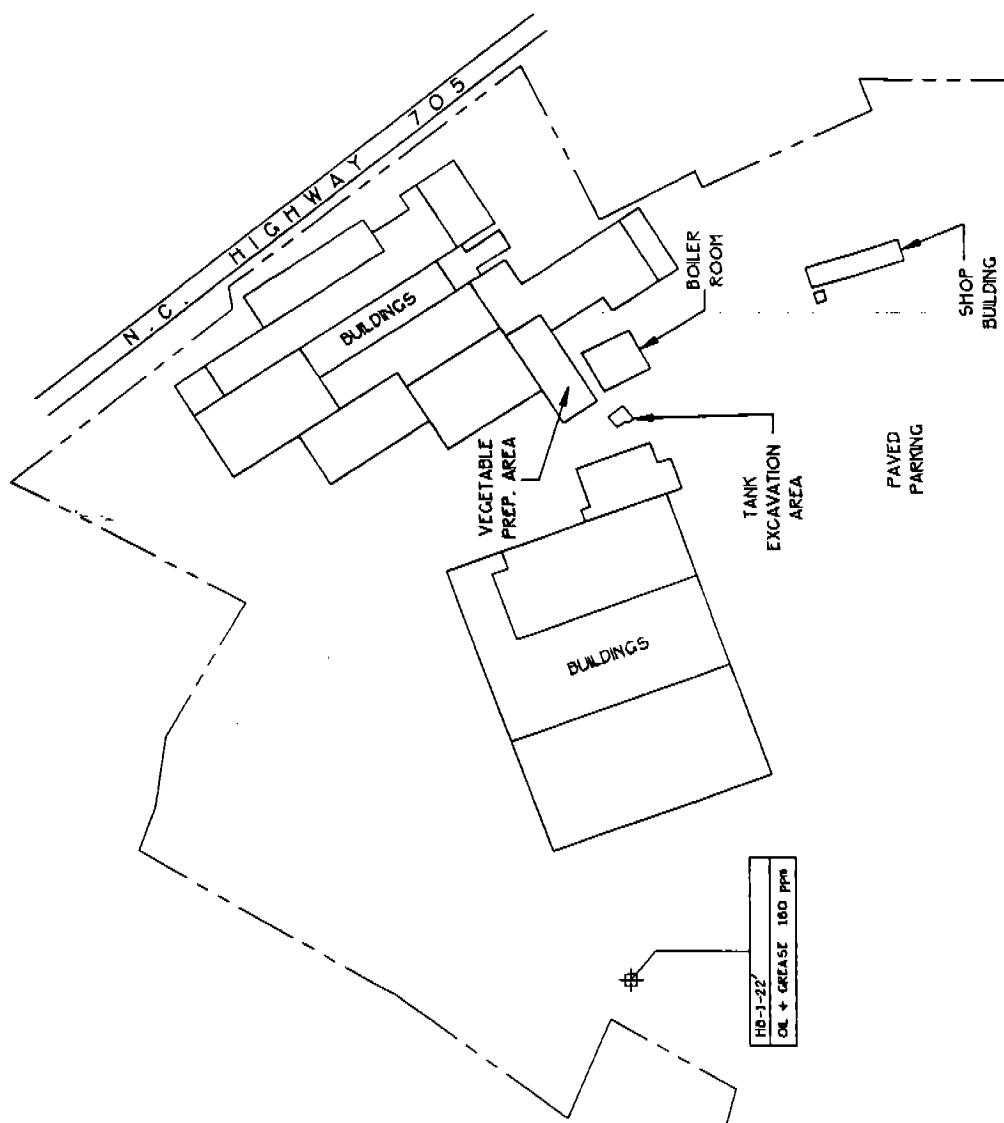
II. Site geology

According to the North Carolina State Geological Survey, the site lies within the east-west trending Carolina Slate Belt physiographic province. Bedrock underlying the site is predominantly made up of Precambrian age metamorphosed volcanics of the Uwharrie Formation. The Uwharrie Formation consists of light-gray to greenish-gray felsic metavolcanics (meta dacitic-rhyolitic flows and tuffs) interbedded with mafic and intermediate volcanic rock and meta-argillites and meta-mudstones.

A review of available boring logs indicate that the depth to bedrock is approximately 50 feet beneath the site. The bedrock surface is highly weathered (saprolites), with a high silt and clay content. The bedrock is overlain by sand which ranges in thickness from 15 to 45 feet. Overlying the sand deposits are approximately 5 to 10 feet of red-brown clay.

Groundwater was measured beneath the property at a depth of approximately 43.5 feet below grade in a background monitoring well located approximately 500 feet west of the tank excavation. A review of the monitoring well record indicated that this well was completed within the overburden sand deposits to a depth of 50 feet below grade (Attachment 1).





LEGEND

— - - PROPERTY BOUNDARY

⊕ BACKGROUND SOIL SAMPLE

SCALE

3.35 0 3.35 FEET

FIGURE 1

SITE LAYOUT

LUCK'S INCORPORATED
SEAGROVE, NORTH CAROLINA

McLAREN/HART
ENVIRONMENTAL ENGINEERING CORP.
WARREN, NEW JERSEY



CHKD S.S.

DRAWN S.F.H. DATE, 08/13/92
SCALE AS SHOWN

III. Summary of previous investigations

In August of 1990, a total of seven post-excavation soil samples (HA-3A, HA-3B, HA-4A, HA-4B, HA-5A, HA-5B and HA-5C) were collected from the base of the excavation at locations shown in Figure 2. The soil samples were collected from a depth of approximately 21.5 feet below grade by Spatco Environmental of Kernersville, North Carolina. The soil samples were analyzed by Law and Co. Laboratories for oil and grease using method 9071, as required by NCDEHNR for No 5 fuel oil USTs investigations. The oil and grease analytical results are summarized in Figure 2. Four samples (HB-3B, HB-4B, HB-5A and HB-5C) yielded concentrations of oil and grease ranging from 80 ppm (HA-5A) to 643 ppm (HB-3B).

At the request of NCDEHNR (letter dated September 11, 1991; provided in Attachment 2), and to establish the baseline concentration of naturally occurring oil and grease beneath the site, a background sample (HB-1-22') was collected by Spatco on October 23, 1991 and analyzed using method 9071 for oil and grease. Sample HB-1-22' was collected from a depth of 22 feet at a location away from existing underground storage tanks and manufacturing/processing areas, as shown on the site map. The background sample was analyzed by EnviroTech Mid-Atlantic of Blacksburg, Virginia. HB-1-22' yielded a background oil and grease concentration of 180 ppm.

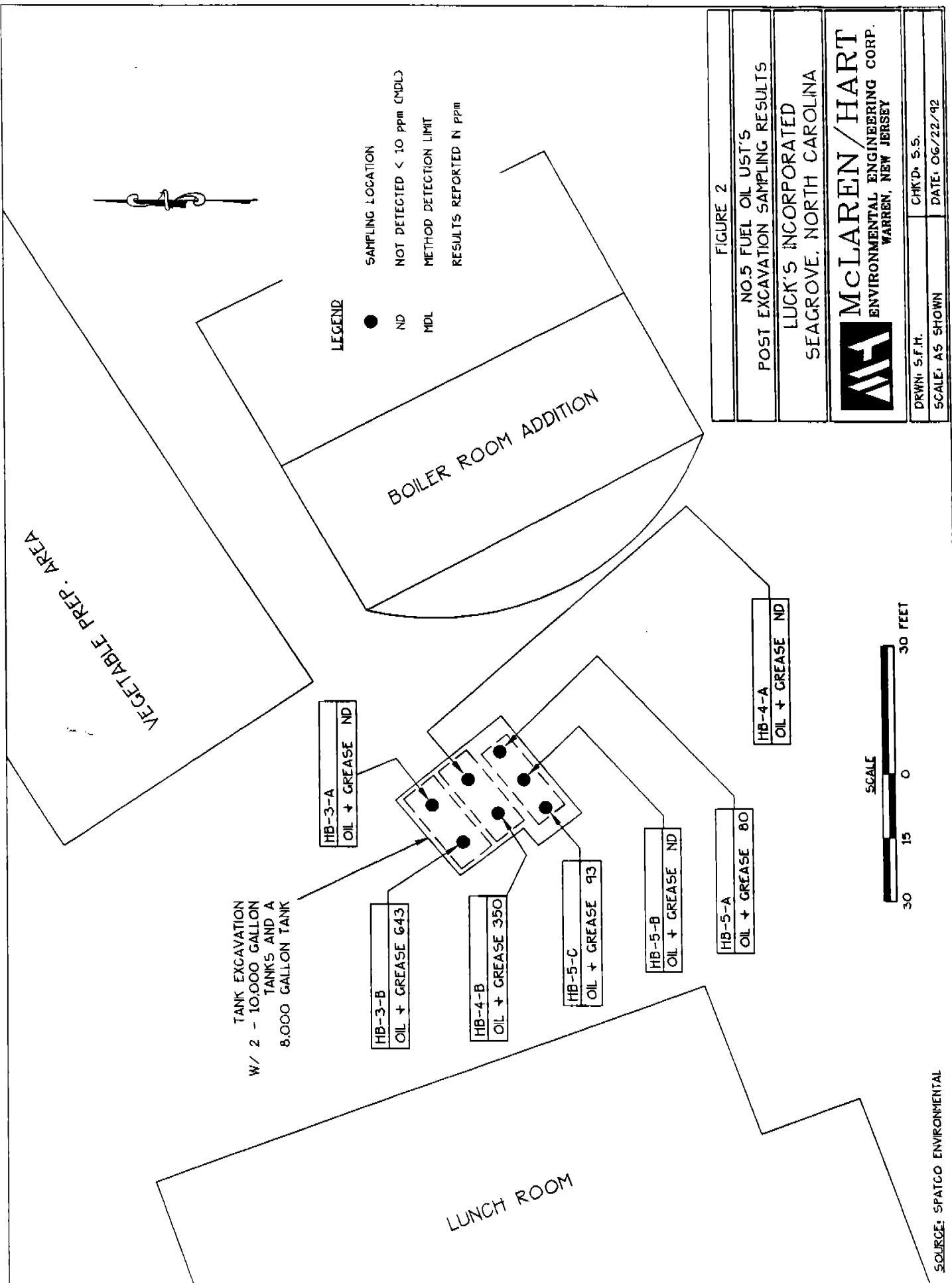
Based on the results of the background sample , NCDEHNR has assigned a remedial level of 190 ppm oil and grease for soils beneath the site (letter dated November 14, 1991; provided in Attachment 3). Two post-excavation soil samples, HB-3B (643 ppm oil and grease) and HB-4B (350 ppm oil and grease) exceeded the background concentration of 190 ppm oil and grease. As such, Luck's Inc was directed by NCDEHNR to conduct one of the following actions:

- excavate all soils with oil and grease concentrations greater than 190 ppm and conduct post-excavation sampling, or
- install a groundwater monitoring well downgradient of the tank excavation and sample annually for base neutral compounds using method 625, including a ten-peak library search.

IV. Current investigation

Based on analytical results from previous soil samples, it appeared that the detected concentrations of oil and grease may not be related to the USTs, but due to naturally occurring organic oil and grease. At the request of NCDEHNR, Luck's Inc., resampled soils in the area of the four samples (HB-3B, HB-4B, HB-5A and HB-5C) which indicated detectable levels of oil and grease. The four samples were analyzed for total petroleum hydrocarbons (TPH) using method 9073 and base neutrals using method 8270, as directed by NCDEHNR. Method 9073 is a non EPA approved method which involves a "natural oil and grease" clean-up process. According to NCDEHNR, method 9073 will indicate whether the detected levels of oil and grease are naturally occurring or from the No.5 fuel oil.





Four soil borings were completed using a hollow stem auger drill rig at locations shown in Figure 3. Soil samples **HB-3B-1**, **HB-4B-1**, **HB-5A-1** and **HB-5C-1** were collected from a depth of approximately 21.5 feet, at the former sample locations HB-3B, HB-4B, HB-5A and HB-5C, respectively. The soil samples were collected in accordance with the Standard Penetration Test Procedure (ASTM D 1586/67) using a properly decontaminated two-inch outer diameter split-spoon sampler. All split spoon samples were collected by McLaren/Hart Environmental Engineering Corp., of Warren, New Jersey.

In addition, one field blank (FB070792) was also collected and analyzed for the same parameters for QA/QC purposes. All analyses were performed by General Engineering Laboratories (GEL) of Charleston, South Carolina. GEL is certified by the state of North Carolina (certification No. 233).

Soil samples HB-3B-1, HB-4B-1, HB-5A-1 and HB-5C-1 yielded detectable concentrations of TPH at 36 ppm, 204 ppm, 31 ppm, and 22 ppm, respectively. The field blank yielded non-detectable concentrations of TPH. TPH analytical results are presented in Table 1 and summarized in Figure 3. Complete laboratory analytical results are provided in Attachment 4.

Soil samples HB-3B-1, HB-4B-1, HB-5A-1 and HB-5C-1 and the field blank yielded non-detectable concentrations of targeted base neutral compounds. Further review of the chromatograms indicate that all five samples did not contain any non-targeted hydrocarbon compounds. Base neutrals analytical results are presented in Table 1 and summarized in Figure 3. Complete laboratory analytical results, including chromatograms for HB-3B-1 and HB-4B-1 are provided in Attachment 4.

V. Conclusions

A thorough investigation has been conducted to address the potential impact on soils from the operation of three No.5 fuel oil USTs. The tanks and surrounding soils were excavated and disposed of in accordance with applicable state and federal regulations. Verbal accounts from facility personnel indicated that the USTs were in good condition and did not appear to be leaking. Recent sample results indicate concentrations of TPH at 204 ppm (HB-4B) or less in the soils in this area. Analysis of these soil samples for base neutral compounds show non-detectable levels of these compounds. Based on these data, it is apparent that the soils in the area of the tanks are not contaminated with fuel oil. During the excavation there was no evidence of fuel product in the soils. In addition, there was no evidence of fuel oil odor from the soils in the excavation.

Considering the type of material stored in the USTs (No. 5 fuel oil) and its physical properties, any discharge which may have occurred from the USTs, would have remained in close proximity to the tank system and subsequently been removed during excavation. In addition, any discharge of the No. 5 fuel oil would be apparent both visually and by smell in the surrounding soils or in the samples collected; neither were observed.



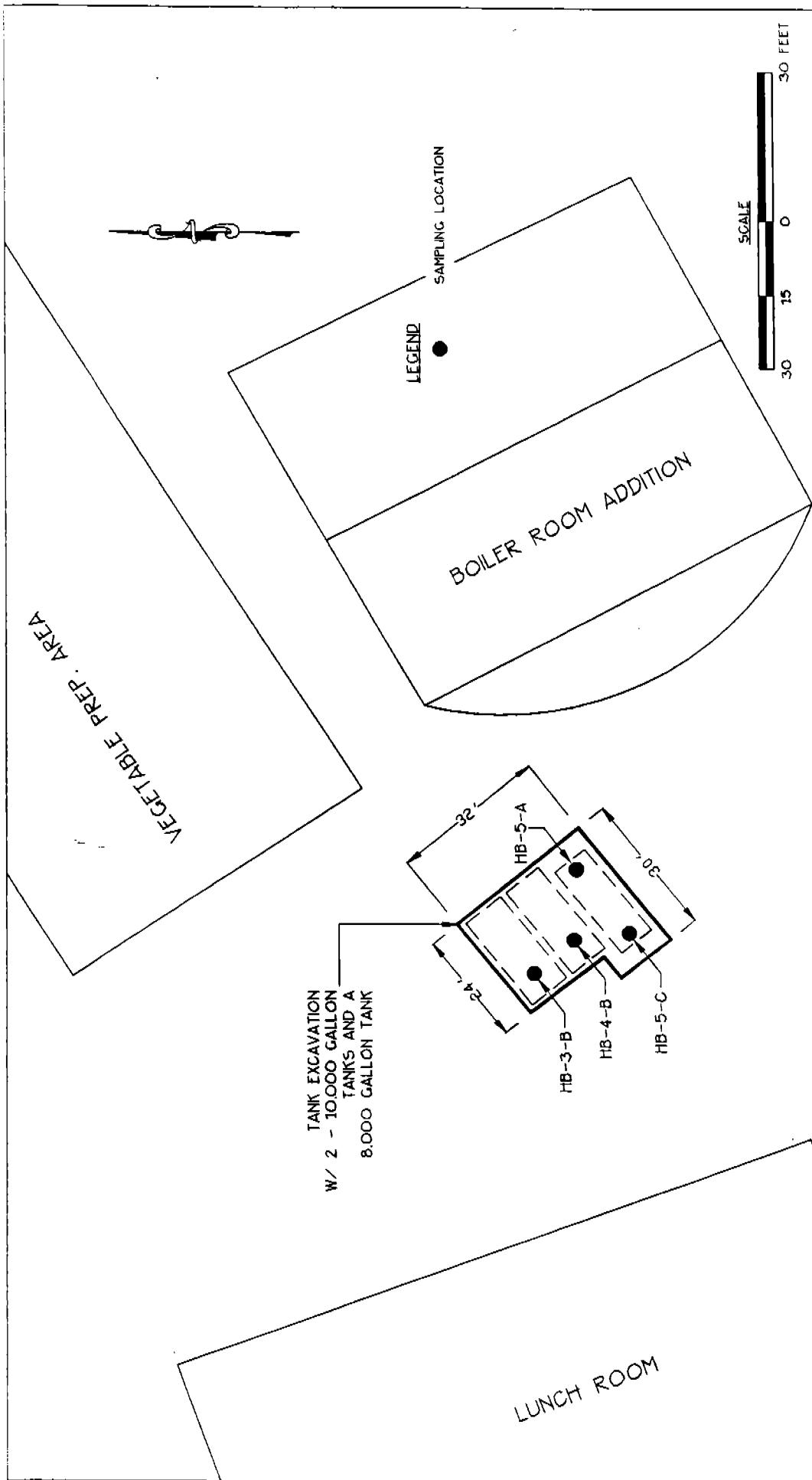


FIGURE 3				
NO.5 FUEL OIL UST'S EXCAVATION				
SUMMARY OF SOIL ANALYTICAL RESULTS				
LUCK'S INCORPORATED				
SEAGROVE, NORTH CAROLINA				
MCLAREN/HART				
ENVIRONMENTAL ENGINEERING CORP.				
WARREN, NEW JERSEY				

Note: Results reported in ppm, above MLL.
ND = Not detected above method detection limits
Background concentration of oil and grease = 100 ppm yielded by sample HB-1-22 analyzed via method 9071, during October 1991.

Sample Number	HB-3B	HB-4B	HB-5A	HB-5C
Spato, August 1990 Oil and Grease; method 9071	643	350	80	93
McLaren/Hart, July 1992 TPH; method 9073 Base neutrals; method 8270 (625)	36	204 ND	31 ND	22 ND

DRAWN S.F.H. CHKD: S.S.
SCALE AS SHOWN DATE: 08/13/92

TABLE 1
No.5 Fuel Oil USTs Excavation
Summary of Post Excavation Soil Sampling Results
Luck's Inc., Seagrove, NC

Sample Number	HB-3B	HB-4B	HB-5A	HB-5C
Sample Depth (ft)	21.5	21.5	21.5	21.5

Parameters (Results reported in parts per million)

Spatco, August 1990				
Oil and Grease: method 9071 *	643	350	80	93

Background concentration of oil and grease = 180 ppm ; yielded by sample HB-1-22 analyzed via method 9071, during October 1991.

McLaren/Hart, July 1992				
TPH: method 9073 ** Base neutrals: method 8270 (625)	36 ND	204 ND	31 ND	22 ND

Note:

* : Samples analyzed for oil and grease

** : TPH, less natural oil and grease

ND: Not detected above method detection limits

Because of the low levels of TPH detected, the low mobility of TPH in soils, the absence of base neutral compounds, and the depth to groundwater (approximately 43 feet below grade in the vicinity of the tank excavation), the concentrations of TPH detected do not represent an apparent contamination problem. Therefore no further investigation or excavation is warranted and tank closure activities are considered complete at this time.

VI. Recommendations

Based on a review of available hydrogeologic information, the physical properties of No.5 fuel oil, depth to groundwater in excess of 40 feet, and the analytical results of two rounds of post-excavation soil sampling, there is no indication of a contamination problem resulting from the operation of the underground tank farm. McLaren/Hart therefore recommends that this investigation be considered complete.



Attachment 1
Background monitoring well record

NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES & COMMUNITY DEVELOPMENT
WELL RECORD
DIVISION OF ENVIRONMENTAL MANAGEMENT
P.O. Box 27687 - RALEIGH, N.C. 27611 919-733-2020
DRILLING CONTRACTOR MCGALL BROS. REG. NO. 3 WELL CONSTRUCTION PERMIT NO. 3

1. WELL LOCATION: (Show sketch of the location below)

Nearest Town: SEA GROVE N.C. County: _____
 Quadrangle No. _____
 (Road, Community or Subdivision and Lot No.)

2. OWNER: LUCKS FOODS

3. ADDRESS: SEA GROVE N.C.

4. TOPOGRAPHY: draw, valley, slope hilltop, flat (circle one)

5. USE OF WELL: MONITORING DATE: 1-24-86

6. DOES THIS WELL REPLACE AN EXISTING WELL? NO

7. TOTAL DEPTH: 50' RIG TYPE OR METHOD: AIR

8. FORMATION SAMPLES COLLECTED: YES NO X

9. CASING: Depth Inside Wall thick. type
Dia. or weight/ft.

From 0 to 45 ft 4" PVC

10. GROUT: Depth Material Method

From 0 to 5 ft CEMENT POL. RED

11. SCREEN: Depth Dia. Type & Opening

From 45 to 50 ft 4" 0.20

If additional space is needed, use back of form

LOCATION SKETCH
(Show distance to numbered roads, or other map reference points)

12. GRAVEL: Depth Size Material

From 40 to 50 ft STONE

13. WATER ZONES (depth): _____

14. STATIC WATER LEVEL: 40 ft. above top of casing
below bottom of casing

Casing is _____ ft. above land surface ELEV: _____

15. YIELD (gpm): _____ METHOD OF TESTING: _____

16. PUMPING WATER LEVEL: _____ ft.

after _____ hours at _____ gpm.

17. CHLORINATION: Type _____ Amount _____

18. WATER QUALITY: _____ TEMPERATURE (°F) _____

19. PERMANENT PUMP: Date Installed _____

Type _____ Capacity _____ (gpm) HP _____

Make _____ Intake Depth _____

Airline Depth _____

20. HAS THE OWNER BEEN PROVIDED A COPY OF THIS RECORD AND INFORMED OF THE DEPARTMENTS REQUIREMENTS AND
RECOMMENDATIONS? _____

21. REMARKS _____

I do hereby certify that this well was constructed in accordance with N.C. Well Construction
Regulations and Standards and that this well record is true and exact.

McGall Brothers
SIGNATURE OF CONTRACTOR OR AGENT

3/25/86
DATE

Attachment 2
NCDEHNR correspondence
September 11, 1991

T. A. Salley

P. M. King

9/13/91
4/13/91



State of North Carolina
Department of Environment, Health, and Natural Resources
Winston-Salem Regional Office

James G. Martin, Governor
William W. Cobey, Jr., Secretary

Margaret Plemmons Foster
Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT
GROUNDWATER SECTION

September 11, 1991

Darian⁴⁶ Luck
Luck's Inc
P.O. Box 510
Highway 705 East
Seagrove, NC 27341-0510

SUBJECT: UST Closure at Luck's Plant, Highway 705 East,
Seagrove, North Carolina

Dear Mr. Luck:

The Groundwater Section of the Division of Environmental Management at this office is presently reviewing the tank closure assessment for the subject location which was received in this office on June 8, 1990. We apologize for the delay in our response to your assessment. Due to reservation about the accuracy of EPA Test Method 9070 expressed to Mr. Steve Kay of the Groundwater Section by yourself and your consultant, we have been researching alternative soil sample test methods. The research of other methods, combined the overwhelming number of UST closures in the Winston-Salem Region, is responsible for our delay in responding.

If 9071 is to be used it will be necessary to take a background sample. The acceptable cleanup will be 100 PPM T O & G or background which ever is lower. If you wish to look into alternative test methods, there maybe one acceptable test. Please contact Connie Crosley at (919) 733-7015 for more information on acceptable test methods.

If you have any questions, please feel free to contact me at the letterhead address or telephone number.

Sincerely,

Thomas A. Salley
Thomas A. Salley
Hydrogeological Technician

EPA
625 Test
10 most points
TAS/ahl
cc: WSRO

Attachment 3
NCDEHNR Correspondence
November 14, 1991

Attachment 4
Laboratory Analytical Results



GENERAL ENGINEERING LABORATORIES

Environmental Engineering and Analytical Services

Molly F. Greene
President

George C. Greene, P.E., Ph.D.
Vice President
SC Registration No. 9103

Laboratory	Certifications:
FL	E87156/87294
NC	233
SC	10120
VA	00151
TN	02934
WI	99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

Released by:

QA/QC Officer

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 1

Sample ID	:	HB-3B-1
Lab ID	:	9207192-04
Matrix	:	Soil
Date Collected	:	07/08/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Organic Prep

Evaporative Loss @ 105 C 21.0 wt%

Extractable Organics

Method 8270 Base/Neutral Compounds

1,2,4,5-Tetrachlorobenzene	< 330 ppb
1,2,4-Trichlorobenzene	< 330 ppb
1,2-Dichlorobenzene	< 330 ppb
1,3-Dichlorobenzene	< 330 ppb
1,4-Dichlorobenzene	< 330 ppb
1,4-Dioxane	< 422 ppb
1,4-Naphthoquinone	< 422 ppb
1-Naphthylamine	< 330 ppb
2,4-Dinitrotoluene	< 330 ppb
2,6-Dinitrotoluene	< 330 ppb
2-Acetylaminofluorene	< 747 ppb
2-Chloronaphthalene	< 330 ppb
2-Methylnaphthalene	< 330 ppb
2-Naphthylamine	< 330 ppb
2-Picoline	< 330 ppb
3,3'-Dichlorobenzidine	< 660 ppb
3,3'-Dimethylbenzidine	< 422 ppb
3-Methylcholanthrene	< 422 ppb
4,4'-DDD	< 422 ppb
4,4'-DDE	< 422 ppb
4,4'-DDT	< 422 ppb
4-Bromophenyl phenyl ether	< 422 ppb



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Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 2

Sample ID	:	HB-3B-1
Lab ID	:	9207192-04
Matrix	:	Soil
Date Collected	:	07/08/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

4-Chloroaniline	< 330 ppb
4-Chlorophenyl phenyl ether	< 330 ppb
4-Nitroquinoline	< 1340 ppb
4-aminobiphenyl	< 422 ppb
5-Nitro-o-toluidine	< 330 ppb
7,12-Dimethylbenz(a)anthracene	< 464 ppb
Acenaphthene	< 330 ppb
Acenaphthylene	< 330 ppb
Acetophenone	< 330 ppb
Aldrin	< 709 ppb
Aniline	< 330 ppb
Anthracene	< 330 ppb
Aramite	< 330 ppb
Benzidine	< 422 ppb
Benzo(a)anthracene	< 330 ppb
Benzo(a)pyrene	< 330 ppb
Benzo(b)fluoranthene	< 395 ppb
Benzo(ghi)perylene	< 330 ppb
Benzo(k)fluoranthene	< 527 ppb
Benzyl Alcohol	< 330 ppb
Butyl benzyl phthalate	< 330 ppb
Chlordane	< 422 ppb
Chlorobenzilate	< 330 ppb
Chrysene	< 422 ppb
Di-n-butyl phthalate	< 422 ppb
Di-n-octyl phthalate	< 422 ppb
Diallate	< 330 ppb
Dibenzo(a,h)anthracene	< 330 ppb
Dibenzofuran	< 330 ppb
Dieldrin	< 772 ppb



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25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 3

Sample ID	:	HB-3B-1
Lab ID	:	9207192-04
Matrix	:	Soil
Date Collected	:	07/08/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Diethyl phthalate	< 330 ppb
Dimethoate	< 330 ppb
Dimethyl phthalate	< 330 ppb
Diphenylamine	< 330 ppb
Disulfoton	< 422 ppb
Endosulfan I	< 422 ppb
Endosulfan II	< 422 ppb
Endosulfan sulfate	< 751 ppb
Endrin	< 793 ppb
Endrin aldehyde	< 1440 ppb
Ethyl Methanesulfonate	< 422 ppb
Famphur	< 330 ppb
Fluoranthene	< 330 ppb
Fluorene	< 330 ppb
Heptachlor	< 941 ppb
Heptachlor epoxide	< 421 ppb
Hexachlorobenzene	< 330 ppb
Hexachlorobutadiene	< 330 ppb
Hexachlorocyclopentadiene	< 460 ppb
Hexachloroethane	< 330 ppb
Hexachloropropene	< 330 ppb
Indeno(1,2,3-c,d)pyrene	< 422 ppb
Isodrin	< 330 ppb
Isophorone	< 330 ppb
Isosafrole	< 330 ppb
Kepone	< 330 ppb
Methapyrilene	< 330 ppb
Methyl Methanesulfonate	< 422 ppb
N-Nitrosodi-n-butylamine	< 422 ppb
N-Nitrosodiethylamine	< 422 ppb



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Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 4

Sample ID	:	HB-3B-1
Lab ID	:	9207192-04
Matrix	:	Soil
Date Collected	:	07/08/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

N-Nitrosodimethylamine	< 330 ppb
N-Nitrosodiphenylamine	< 422 ppb
N-Nitrosodipropylamine	< 330 ppb
N-Nitrosomethylamine	< 2950 ppb
N-Nitrosomorpholine	< 330 ppb
N-Nitrosopiperidine	< 330 ppb
N-Nitrosopyrrolidine	< 330 ppb
Naphthalene	< 330 ppb
Nitrobenzene	< 330 ppb
O,O,O-Triethylphosphorothioate	< 422 ppb
Parathion, methyl	< 330 ppb
Pentachlorobenzene	< 330 ppb
Pentachloroethane	< 330 ppb
Pentachloronitrobenzene	< 330 ppb
Phenacetin	< 330 ppb
Phenanthrene	< 330 ppb
Phorate	< 330 ppb
Pronamide	< 330 ppb
Pyrene	< 330 ppb
Pyridine	< 789 ppb
Safrole	< 330 ppb
Sulfotep	< 422 ppb
Thionazin	< 422 ppb
Toxaphene	< 422 ppb
Tributylphosphate	< 422 ppb
a-,a-Dimethylphenethylamine	< 422 ppb
alpha-BHC	< 422 ppb
beta-BHC	< 422 ppb
bis(2-Chloroethoxy)methane	< 330 ppb
bis(2-Chloroethyl) ether	< 330 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 5

Sample ID	:	HB-3B-1
Lab ID	:	9207192-04
Matrix	:	Soil
Date Collected	:	07/08/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

bis(2-Chloroisopropyl)ether	< 330 ppb
bis(2-Ethylhexyl)phthalate	< 422 ppb
delta-BHC	< 422 ppb
gamma-BHC	< 1220 ppb
m-Dinitrobenzene	< 330 ppb
m-Nitroaniline	< 2110 ppb
o-Nitroaniline	< 330 ppb
o-Toluidine	< 330 ppb
p-Dimethylaminoazobenzene	< 422 ppb
p-Nitroaniline	< 1810 ppb
p-Phenylenediamine	< 330 ppb
sym-Trinitrobenzene	< 422 ppb

General Chemistry

Total Petroleum Hydrocarbons 35.6 ppm

The following preparation procedures were performed:

Ext. & Conc. - B/N Compounds

Sample: 9207192-04 Client ID: Matrix: Soil Description: HB-38-1
 Sampled: 07/08/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surv. %	Blank	RPD	%Rec
TC: B/N EXT	Method: EPA 8270				Batch:	Run Analyst:	DOA:	TOA:	N/D
TC: EVAP LOSS	Method: EPA 160.3				Batch: 16959	Run Analyst: BDK	DOA: 07/11/92	TOA: 1200	OK
Evaporative Loss @ 105 C	21.0	wt%	0.00		wt%	1:1	0.00	0.00%	N/C
TC: 8270 B/N	Method: EPA 8270				Batch: 17692	Run Analyst: AGW	DOA: 07/16/92	TOA: 1848	OK
					Prep Analyst:	BDK	DOP: 07/15/92	TOP: 1600	OK
1,2,4,5-Tetrachlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,2,4-Trichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,2-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,3-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,4-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,4-Dioxane	0.00	ppm	<	422.	ppb	1:1	< 422.		
1,4-Naphthoquinone	0.00	ppm	<	422.	ppb	1:1	< 422.		
1-Naphthylamine	0.00	ppm	<	330.	ppb	1:1	< 330.		
2,4-Dinitrotoluene	0.00	ppm	<	330.	ppb	1:1	< 330.	0.00%	48.0%
2,6-Dinitrotoluene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Acetylaminofluorene	0.00	ppm	<	747.	ppb	1:1	< 747.		
2-Chloronaphthalene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Fluorobiphenyl	1.05	ppb	422.		ppb	1:1	49.8%	< 422.	
2-Methylnaphthalene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Naphthylamine	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Picoline	0.00	ppm	<	330.	ppb	1:1	< 330.		
3,3'-Dichlorobenzidine	0.00	ppm	<	660.	ppb	1:1	< 660.		
3,3'-Dimethylbenzidine	0.00	ppm	<	422.	ppb	1:1	< 422.		
3-Methylcholanthrene	0.00	ppm	<	422.	ppb	1:1	< 422.		
4,4'-DDD	0.00	ppm	<	422.	ppb	1:1	< 422.	0.00%	N/C
4,4'-DDE	0.00	ppm	<	422.	ppb	1:1	< 422.	0.00%	N/C
4,4'-DDT	0.00	ppm	<	422.	ppb	1:1	< 422.	0.00%	N/C
4-Bromophenyl phenyl ether	0.00	ppm	<	422.	ppb	1:1	< 422.		
4-Chloroaniline	0.00	ppm	<	330.	ppb	1:1	< 330.		
4-Chlorophenyl phenyl ether	0.00	ppm	<	330.	ppb	1:1	< 330.		
4-Mitroquinoline	0.00	ppm	<	1340	ppb	1:1	< 1340		
4-aminobiphenyl	0.00	ppm	<	422.	ppb	1:1	< 422.		
5-Nitro-o-toluidine	0.00	ppm	<	330.	ppb	1:1	< 330.		
7,12-Dimethylbenz(a)anthracene	0.00	ppm	<	464.	ppb	1:1		N/C	
Acenaphthene	0.00	ppm	<	330.	ppb	1:1	< 330.	0.00%	64.0%
Acenaphthylene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Acetophenone	0.00	ppm	<	330.	ppb	1:1	< 330.		
Aldrin	0.00	ppm	<	709.	ppb	1:1	< 709.	0.00%	N/C
Aniline	0.00	ppm	<	330.	ppb	1:1	< 330.		
Anthracene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Aramite	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzidine	0.00	ppm	<	422.	ppb	1:1	< 422.	0.00%	N/C
Benzo(a)anthracene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(a)pyrene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(b)fluoranthene	0.00	ppm	<	395.	ppb	1:1	< 395.		
Benzo(ghi)perylene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(k)fluoranthene	0.00	ppm	<	527.	ppb	1:1	< 527.		
Benzyl Alcohol	0.00	ppm	<	330.	ppb	1:1	< 330.		
Butyl benzyl phthalate	0.00	ppm	<	330.	ppb	1:1	< 330.		
Chlordane	0.00	ppm	<	422.	ppb	1:1	< 422.	0.00%	N/C
Chlorobenzilate	0.00	ppm	<	330.	ppb	1:1	< 330.		
Chrysene	0.00	ppm	<	422.	ppb	1:1	< 422.		
Di-n-butyl phthalate	0.00	ppm	<	422.	ppb	1:1	< 422.		
Di-n-octyl phthalate	0.00	ppm	<	422.	ppb	1:1	< 422.		

Sample: 9207192-04 Client ID: Matrix: Soil Description: HB-3B-1
 Sampled: 07/08/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Diallate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Oibenzo(a,h)anthracene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dibenzofuran	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dieldrin	0.00	ppm	< 772.	ppb	1:1		< 772.	0.00%	N/C
Diethyl phthalate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dimethoate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dimethyl phthalate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Diphenylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
Disulfoton	0.00	ppm	< 422.	ppb	1:1		< 422.		
Endosulfan I	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
Endosulfan II	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
Endosulfan sulfate	0.00	ppm	< 751.	ppb	1:1		< 751.	0.00%	N/C
Endrin	0.00	ppm	< 793.	ppb	1:1		< 793.	0.00%	N/C
Endrin aldehyde	0.00	ppm	< 1440	ppb	1:1		< 1440	0.00%	N/C
Ethyl Methanesulfonate	0.00	ppm	< 422.	ppb	1:1		< 422.		
Famphur	0.00	ppm	< 330.	ppb	1:1		< 330.		
Fluoranthene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Fluorene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Heptachlor	0.00	ppm	< 941.	ppb	1:1		< 941.	0.00%	N/C
Heptachlor epoxide	0.00	ppm	< 421.	ppb	1:1		< 421.	0.00%	N/C
Hexachlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachlorobutadiene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachlorocyclopentadiene	0.00	ppm	< 460.	ppb	1:1		< 460.		
Hexachloroethane	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachloropropene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Indeno(1,2,3-c,d)pyrene	0.00	ppm	< 422.	ppb	1:1		< 422.		
Isodrin	0.00	ppm	< 330.	ppb	1:1		< 330.		
Isophorone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Isosafrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Kepone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Methapyrilene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Methyl Methanesulfonate	0.00	ppm	< 422.	ppb	1:1		< 422.		
N-Mitrosodi-n-butylamine	0.00	ppm	< 422.	ppb	1:1		< 422.		
N-Mitrosodiethylamine	0.00	ppm	< 422.	ppb	1:1		< 422.		
N-Mitrosodimethylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Mitrosodiphenylamine	0.00	ppm	< 422.	ppb	1:1		< 422.		
N-Mitrosodipropylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Mitrosomethylethylamine	0.00	ppm	< 2950	ppb	1:1		< 2950		
N-Nitrosomorpholine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosopiperidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosopyrrolidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
Naphthalene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Nitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Nitrobenzene-d5	0.759	ppb	422.	ppb	1:1	36.0%	< 422.		
O,O,O-Triethylphosphorothioa	0.00	ppm	< 422.	ppb	1:1			N/C	
Parathion, methyl	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachloroethane	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachloronitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phenacetin	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phenanthrene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phorate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pronamide	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pyrene	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	68.0%

Sample: 9207192-04 Client ID: Matrix: Soil Description: HB-3B-1
Sampled: 07/08/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
Project: MLRM00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Pyridine	0.00	ppm	< 789.	ppb	1:1		< 789.		
Safrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Sulfotep	0.00	ppm	< 422.	ppb	1:1		< 422.		
Thionazin	0.00	ppm	< 422.	ppb	1:1		< 422.		
Toxaphene	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
Tributylphosphate	0.00	ppm	< 422.	ppb	1:1		< 422.		
a-,a-Dimethylphenethylamine	0.00	ppm	< 422.	ppb	1:1		< 422.		
alpha-BHC	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
beta-BHC	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
bis(2-Chloroethoxy)methane	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroethyl) ether	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroisopropyl)ether	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	N/C
bis(2-Ethylhexyl)phthalate	0.00	ppm	< 422.	ppb	1:1		< 422.		
delta-BHC	0.00	ppm	< 422.	ppb	1:1		< 422.	0.00%	N/C
gamma-BHC	0.00	ppm	< 1220	ppb	1:1		< 1220	0.00%	N/C
m-Dinitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
m-Nitroaniline	0.00	ppm	< 2110	ppb	1:1		< 2110		
o-Mitroaniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
o-Toluidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Dimethylaminoazobenzene	0.00	ppm	< 422.	ppb	1:1		< 422.		
p-Mitroaniline	0.00	ppm	< 1810	ppb	1:1		< 1810		
p-Phenylenediamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Terphenyl-d14	1.69	ppb	422.	ppb	1:1	80.1%	< 422.		
sym-Trinitrobenzene	0.00	ppm	< 422.	ppb	1:1		< 422.		
TC: TPH-9073	Method: EPA 9073			Batch: 17388	Run Analyst: SJ DOA: 07/23/92 TOA: 1200 OK				
Total Petroleum Hydrocarbons	35.6	ppm	10.0	ppm	1:1		< 10.0	2.16%	103%



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VA 00151
TN 02934
WI 99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

Released by:

QA/QC Officer

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 1

Sample ID	:	HB-4B-1
Lab ID	:	9207192-03
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Organic Prep

Evaporative Loss @ 105 C

15.0 wt%

Extractable Organics

Method 8270 Base/Neutral Compounds

1,2,4,5-Tetrachlorobenzene	< 330 ppb
1,2,4-Trichlorobenzene	< 330 ppb
1,2-Dichlorobenzene	< 330 ppb
1,3-Dichlorobenzene	< 330 ppb
1,4-Dichlorobenzene	< 330 ppb
1,4-Dioxane	< 392 ppb
1,4-Naphthoquinone	< 392 ppb
1-Naphthylamine	< 330 ppb
2,4-Dinitrotoluene	< 330 ppb
2,6-Dinitrotoluene	< 330 ppb
2-Acetylaminofluorene	< 694 ppb
2-Chloronaphthalene	< 330 ppb
2-Methylnaphthalene	< 330 ppb
2-Naphthylamine	< 330 ppb
2-Picoline	< 330 ppb
3,3'-Dichlorobenzidine	< 660 ppb
3,3'-Dimethylbenzidine	< 392 ppb
3-Methylcholanthrene	< 392 ppb
4,4'-DDD	< 392 ppb
4,4'-DDE	< 392 ppb
4,4'-DDT	< 392 ppb
4-Bromophenyl phenyl ether	< 392 ppb



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25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191 Project Manager: Winter Seibert

Page No.: 2

Sample ID	:	HB-4B-1
Lab ID	:	9207192-03
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

4-Chloroaniline	< 330 ppb
4-Chlorophenyl phenyl ether	< 330 ppb
4-Nitroquinoline	< 1250 ppb
4-aminobiphenyl	< 392 ppb
5-Nitro-o-toluidine	< 330 ppb
7,12-Dimethylbenz(a)anthracene	< 431 ppb
Acenaphthene	< 330 ppb
Acenaphthylene	< 330 ppb
Acetophenone	< 330 ppb
Aldrin	< 659 ppb
Aniline	< 330 ppb
Anthracene	< 330 ppb
Aramite	< 330 ppb
Benzidine	< 392 ppb
Benzo(a)anthracene	< 330 ppb
Benzo(a)pyrene	< 330 ppb
Benzo(b)fluoranthene	< 367 ppb
Benzo(ghi)perylene	< 330 ppb
Benzo(k)fluoranthene	< 490 ppb
Benzyl Alcohol	< 330 ppb
Butyl benzyl phthalate	< 330 ppb
Chlordane	< 392 ppb
Chlorobenzilate	< 330 ppb
Chrysene	< 392 ppb
Di-n-butyl phthalate	< 392 ppb
Di-n-octyl phthalate	< 392 ppb
Diallate	< 330 ppb
Dibenzo(a,h)anthracene	< 330 ppb
Dibenzofuran	< 330 ppb
Dieldrin	< 718 ppb



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25 Independence Boulevard
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cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 3

Sample ID	:	HB-4B-1
Lab ID	:	9207192-03
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Diethyl phthalate	< 330 ppb
Dimethoate	< 330 ppb
Dimethyl phthalate	< 330 ppb
Diphenylamine	< 330 ppb
Disulfoton	< 392 ppb
Endosulfan I	< 392 ppb
Endosulfan II	< 392 ppb
Endosulfan sulfate	< 698 ppb
Endrin	< 737 ppb
Endrin aldehyde	< 1340 ppb
Ethyl Methanesulfonate	< 392 ppb
Famphur	< 330 ppb
Fluoranthene	< 330 ppb
Fluorene	< 330 ppb
Heptachlor	< 875 ppb
Heptachlor epoxide	< 391 ppb
Hexachlorobenzene	< 330 ppb
Hexachlorobutadiene	< 330 ppb
Hexachlorocyclopentadiene	< 427 ppb
Hexachloroethane	< 330 ppb
Hexachloropropene	< 330 ppb
Indeno(1,2,3-c,d)pyrene	< 392 ppb
Isodrin	< 330 ppb
Isophorone	< 330 ppb
Isosafrole	< 330 ppb
Kepone	< 330 ppb
Methapyrilene	< 330 ppb
Methyl Methanesulfonate	< 392 ppb
N-Nitrosodi-n-butylamine	< 392 ppb
N-Nitrosodiethylamine	< 392 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
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Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 4

Sample ID	:	HB-4B-1
Lab ID	:	9207192-03
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

N-Nitrosodimethylamine	< 330 ppb
N-Nitrosodiphenylamine	< 392 ppb
N-Nitrosodipropylamine	< 330 ppb
N-Nitrosomethylmethylethylamine	< 2750 ppb
N-Nitrosomorpholine	< 330 ppb
N-Nitrosopiperidine	< 330 ppb
N-Nitrosopyrrolidine	< 330 ppb
Naphthalene	< 330 ppb
Nitrobenzene	< 330 ppb
O,O,O-Triethylphosphorothioate	< 392 ppb
Parathion, methyl	< 330 ppb
Pentachlorobenzene	< 330 ppb
Pentachloroethane	< 330 ppb
Pentachloronitrobenzene	< 330 ppb
Phenacetin	< 330 ppb
Phenanthrene	< 330 ppb
Phorate	< 330 ppb
Pronamide	< 330 ppb
Pyrene	< 330 ppb
Pyridine	< 733 ppb
Safrole	< 330 ppb
Sulfotep	< 392 ppb
Thionazin	< 392 ppb
Toxaphene	< 392 ppb
Tributylphosphate	< 392 ppb
a-,a-Dimethylphenethylamine	< 392 ppb
alpha-BHC	< 392 ppb
beta-BHC	< 392 ppb
bis(2-Chloroethoxy)methane	< 330 ppb
bis(2-Chloroethyl) ether	< 330 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 5

Sample ID	:	HB-4B-1
Lab ID	:	9207192-03
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

bis(2-Chloroisopropyl)ether	< 330 ppb
bis(2-Ethylhexyl)phthalate	745 ppb
delta-BHC	< 392 ppb
gamma-BHC	< 1130 ppb
m-Dinitrobenzene	< 330 ppb
m-Nitroaniline	< 1960 ppb
o-Nitroaniline	< 330 ppb
o-Toluidine	< 330 ppb
p-Dimethylaminoazobenzene	< 392 ppb
p-Nitroaniline	< 1690 ppb
p-Phenylenediamine	< 330 ppb
sym-Trinitrobenzene	< 392 ppb

General Chemistry

Total Petroleum Hydrocarbons 204 ppm

The following preparation procedures were performed:
Ext. & Conc. - B/N Compounds

Sample: 9207192-03 Client ID: Matrix: Soil Description: H8-4B-1
Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
TC: B/N EXT	Method: EPA 8270				Batch:	Run Analyst:	DOA:	TOA:	NYD
TC: EVAP LOSS	Method: EPA 160.3				Batch: 16959	Run Analyst: BDK	DOA: 07/11/92	TOA: 1200	OK
Evaporative Loss @ 105 C	15.0	wt%	0.00		wt%	1:1	0.00	0.00%	N/C
TC: 8270 B/N	Method: EPA 8270				Batch: 17692	Run Analyst: AGW	DOA: 07/16/92	TOA: 1756	OK
						Prep Analyst: BDK	DOP: 07/15/92	TOP: 1600	NOT OK
1,2,4,5-Tetrachlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
1,2,4-Trichlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
1,2-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
1,3-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
1,4-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
1,4-Dioxane	0.00	ppm	< 392.	ppb	1:1		< 392.		
1,4-Maphthoquinone	0.00	ppm	< 392.	ppb	1:1		< 392.		
1-Maphthylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
2,4-Dinitrotoluene	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	48.0%
2,6-Dinitrotoluene	0.00	ppm	< 330.	ppb	1:1		< 330.		
2-Acetylaminofluorene	0.00	ppm	< 694.	ppb	1:1		< 694.		
2-Chloronaphthalene	0.00	ppm	< 330.	ppb	1:1		< 330.		
2-Fluorobiphenyl	1.33	ppb	392.	ppb	1:1	67.8%	< 392.		
2-Methylnaphthalene	0.00	ppm	< 330.	ppb	1:1		< 330.		
2-Maphthylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
2-Picoline	0.00	ppm	< 330.	ppb	1:1		< 330.		
3,3'-Dichlorobenzidine	0.00	ppm	< 660.	ppb	1:1		< 660.		
3,3'-Dimethylbenzidine	0.00	ppm	< 392.	ppb	1:1		< 392.		
3-Methylcholanthrene	0.00	ppm	< 392.	ppb	1:1		< 392.		
4,4'-DDD	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
4,4'-DDE	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
4,4'-DDT	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
4-Bromophenyl phenyl ether	0.00	ppm	< 392.	ppb	1:1		< 392.		
4-Chloroaniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
4-Chlorophenyl phenyl ether	0.00	ppm	< 330.	ppb	1:1		< 330.		
4-Nitroquinoline	0.00	ppm	< 1250	ppb	1:1		< 1250		
4-amino biphenyl	0.00	ppm	< 392.	ppb	1:1		< 392.		
5-Mitro-o-tolmidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
7,12-Dimethylbenz(a)anthrace	0.00	ppm	< 431.	ppb	1:1		N/C		
Acenaphthene	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	64.0%
Acenaphthylene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Acetophenone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Aldrin	0.00	ppm	< 659.	ppb	1:1		< 659.	0.00%	N/C
Aniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
Anthracene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Aramite	0.00	ppm	< 330.	ppb	1:1		< 330.		
Benzidine	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
Benzo(a)anthracene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Benzo(a)pyrene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Benzo(b)fluoranthene	0.00	ppm	< 367.	ppb	1:1		< 367.		
Benzo(ghi)perylene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Benzo(k)fluoranthene	0.00	ppm	< 490.	ppb	1:1		< 490.		
Benzyl Alcohol	0.00	ppm	< 330.	ppb	1:1		< 330.		
Butyl benzyl phthalate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Chlordane	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
Chlorobenzilate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Chrysene	0.00	ppm	< 392.	ppb	1:1		< 392.		
Di-n-butyl phthalate	0.00	ppm	< 392.	ppb	1:1		< 392.		
Di-n-octyl phthalate	0.00	ppm	< 392.	ppb	1:1		< 392.		

Sample: 9207192-03 Client ID: Matrix: Soil Description: HB-4B-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Diallate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Oibenzo(a,b)anthracene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dibenzofuran	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dieeldrin	0.00	ppm	< 718.	ppb	1:1		< 718.	0.00%	N/C
Diethyl phthalate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dimethoate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Dimethyl phthalate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Diphenylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
Disulfoton	0.00	ppm	< 392.	ppb	1:1		< 392.		
Endosulfan I	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
Endosulfan II	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
Endosulfan sulfate	0.00	ppm	< 698.	ppb	1:1		< 698.	0.00%	N/C
Endrin	0.00	ppm	< 737.	ppb	1:1		< 737.	0.00%	N/C
Endrin aldehyde	0.00	ppm	< 1340	ppb	1:1		< 1340	0.00%	N/C
Ethyl Methanesulfonate	0.00	ppm	< 392.	ppb	1:1		< 392.		
Famphur	0.00	ppm	< 330.	ppb	1:1		< 330.		
Fluoranthene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Fluorene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Heptachlor	0.00	ppm	< 875.	ppb	1:1		< 875.	0.00%	N/C
Heptachlor epoxide	0.00	ppm	< 391.	ppb	1:1		< 391.	0.00%	N/C
Hexachlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachlorobutadiene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachlorocyclopentadiene	0.00	ppm	< 427.	ppb	1:1		< 427.		
Hexachloroethane	0.00	ppm	< 330.	ppb	1:1		< 330.		
Hexachloropropene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Indeno(1,2,3-c,d)pyrene	0.00	ppm	< 392.	ppb	1:1		< 392.		
Isodrin	0.00	ppm	< 330.	ppb	1:1		< 330.		
Isophorone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Isosafrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Kepone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Methapyrilene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Methyl Methanesulfonate	0.00	ppm	< 392.	ppb	1:1		< 392.		
N-Nitrosodi-n-butylamine	0.00	ppm	< 392.	ppb	1:1		< 392.		
N-Nitrosodiethylamine	0.00	ppm	< 392.	ppb	1:1		< 392.		
N-Nitrosodimethylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosodiphenylamine	0.00	ppm	< 392.	ppb	1:1		< 392.		
N-Nitrosodipropylamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosomethylalkylamine	0.00	ppm	< 2750	ppb	1:1		< 2750		
N-Mitrosomorpholine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosopiperidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
N-Nitrosopyrrolidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
Naphthalene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Nitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Nitrobenzene-d5	1.18	ppb	392.	ppb	1:1	60.2%	< 392.		
O,O,O-Triethylphosphorothioa	0.00	ppm	< 392.	ppb	1:1			N/C	
Parathion, methyl	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachlorobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachloroethane	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pentachloronitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phenacetin	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phenanthrone	0.00	ppm	< 330.	ppb	1:1		< 330.		
Phorate	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pronamide	0.00	ppm	< 330.	ppb	1:1		< 330.		
Pyrene	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	68.0%

Sample: 9207192-03 Client ID: Matrix: Soil Description: HB-4B-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	PPD	xRec
Pyridine	0.00	ppm	< 733.	ppb	1:1		< 733.		
Safrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Sulfoteppe	0.00	ppm	< 392.	ppb	1:1		< 392.		
Thioniazin	0.00	ppm	< 392.	ppb	1:1		< 392.		
Toxaphene	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
Tributylphosphate	0.00	ppm	< 392.	ppb	1:1		< 392.		
a-,a-Dimethylphenethylamine	0.00	ppm	< 392.	ppb	1:1		< 392.		
alpha-BHC	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
beta-BHC	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
bis(2-Chloroethoxy)methane	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroethyl) ether	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroisopropyl)ether	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	N/C
bis(2-Ethylhexyl)phthalate	0.745	ppm	< 392.	ppb	1:1		< 392.		
delta-BHC	0.00	ppm	< 392.	ppb	1:1		< 392.	0.00%	N/C
gamma-BHC	0.00	ppm	< 1130	ppb	1:1		< 1130	0.00%	N/C
m-Dinitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
m-Mitroaniline	0.00	ppm	< 1960	ppb	1:1		< 1960		
o-Mitroaniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
o-Toluidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Dimethylaminoazobenzene	0.00	ppm	< 392.	ppb	1:1		< 392.		
p-Mitroaniline	0.00	ppm	< 1690	ppb	1:1		< 1690		
p-Phenylenediamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Terphenyl-d14	1.69	ppb	392.	ppb	1:1	86.2%	< 392.		
sym-Trinitrobenzene	0.00	ppm	< 392.	ppb	1:1		< 392.		
TC: TPH-9073	Method: EPA 9073						Batch: 17388 Run Analyst: SJ DOA: 07/23/92 TOA: 1200 OK		
Total Petroleum Hydrocarbons	204.	ppm	10.0	ppm	1:1		< 10.0	2.16%	103%



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President

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SC 10120
VA 00151
TN 02934
WI 99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

Released by:

Sue J. Bell
QA/QC Officer

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 1

Sample ID	:	HB-5C-1
Lab ID	:	9207192-02
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Organic Prep

Evaporative Loss @ 105 C

19.0 wt%

Extractable Organics

Method 8270 Base/Neutral Compounds

1,2,4,5-Tetrachlorobenzene	< 330 ppb
1,2,4-Trichlorobenzene	< 330 ppb
1,2-Dichlorobenzene	< 330 ppb
1,3-Dichlorobenzene	< 330 ppb
1,4-Dichlorobenzene	< 330 ppb
1,4-Dioxane	< 412 ppb
1,4-Naphthoquinone	< 412 ppb
1-Naphthylamine	< 330 ppb
2,4-Dinitrotoluene	< 330 ppb
2,6-Dinitrotoluene	< 330 ppb
2-Acetylaminofluorene	< 728 ppb
2-Chloronaphthalene	< 330 ppb
2-Methylnaphthalene	< 330 ppb
2-Naphthylamine	< 330 ppb
2-Picoline	< 330 ppb
3,3'-Dichlorobenzidine	< 660 ppb
3,3'-Dimethylbenzidine	< 412 ppb
3-Methylcholanthrene	< 412 ppb
4,4'-DDD	< 412 ppb
4,4'-DDE	< 412 ppb
4,4'-DDT	< 412 ppb
4-Bromophenyl phenyl ether	< 412 ppb



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Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 2

Sample ID	:	HB-5C-1
Lab ID	:	9207192-02
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

4-Chloroaniline	< 330 ppb
4-Chlorophenyl phenyl ether	< 330 ppb
4-Nitroquinoline	< 1310 ppb
4-aminobiphenyl	< 412 ppb
5-Nitro-o-toluidine	< 330 ppb
7,12-Dimethylbenz(a)anthracene	< 453 ppb
Acenaphthene	< 330 ppb
Acenaphthylene	< 330 ppb
Acetophenone	< 330 ppb
Aldrin	< 691 ppb
Aniline	< 330 ppb
Anthracene	< 330 ppb
Aramite	< 330 ppb
Benzidine	< 412 ppb
Benzo(a)anthracene	< 330 ppb
Benzo(a)pyrene	< 330 ppb
Benzo(b)fluoranthene	< 385 ppb
Benzo(ghi)perylene	< 330 ppb
Benzo(k)fluoranthene	< 514 ppb
Benzyl Alcohol	< 330 ppb
Butyl benzyl phthalate	< 330 ppb
Chlordane	< 412 ppb
Chlorobenzilate	< 330 ppb
Chrysene	< 412 ppb
Di-n-butyl phthalate	< 412 ppb
Di-n-octyl phthalate	< 412 ppb
Diallate	< 330 ppb
Dibenzo(a,h)anthracene	< 330 ppb
Dibenzofuran	< 330 ppb
Dieldrin	< 753 ppb



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Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 3

Sample ID	:	HB-5C-1
Lab ID	:	9207192-02
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Diethyl phthalate	< 330 ppb
Dimethoate	< 330 ppb
Dimethyl phthalate	< 330 ppb
Diphenylamine	< 330 ppb
Disulfoton	< 412 ppb
Endosulfan I	< 412 ppb
Endosulfan II	< 412 ppb
Endosulfan sulfate	< 733 ppb
Endrin	< 774 ppb
Endrin aldehyde	< 1410 ppb
Ethyl Methanesulfonate	< 412 ppb
Famphur	< 330 ppb
Fluoranthene	< 330 ppb
Fluorene	< 330 ppb
Heptachlor	< 918 ppb
Heptachlor epoxide	< 411 ppb
Hexachlorobenzene	< 330 ppb
Hexachlorobutadiene	< 330 ppb
Hexachlorocyclopentadiene	< 449 ppb
Hexachloroethane	< 330 ppb
Hexachloropropene	< 330 ppb
Indeno(1,2,3-c,d)pyrene	< 412 ppb
Isodrin	< 330 ppb
Isophorone	< 330 ppb
Isosafrole	< 330 ppb
Kepone	< 330 ppb
Methapyrilene	< 330 ppb
Methyl Methanesulfonate	< 412 ppb
N-Nitrosodi-n-butylamine	< 412 ppb
N-Nitrosodiethylamine	< 412 ppb



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CERTIFICATE OF ANALYSIS

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Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 4

Sample ID	:	HB-5C-1
Lab ID	:	9207192-02
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

N-Nitrosodimethylamine	< 330 ppb
N-Nitrosodiphenylamine	< 412 ppb
N-Nitrosodipropylamine	< 330 ppb
N-Nitrosomethylethylamine	< 2880 ppb
N-Nitrosomorpholine	< 330 ppb
N-Nitrosopiperidine	< 330 ppb
N-Nitrosopyrrolidine	< 330 ppb
Naphthalene	< 330 ppb
Nitrobenzene	< 330 ppb
O,O,O-Triethylphosphorothioate	< 412 ppb
Parathion, methyl	< 330 ppb
Pentachlorobenzene	< 330 ppb
Pentachloroethane	< 330 ppb
Pentachloronitrobenzene	< 330 ppb
Phenacetin	< 330 ppb
Phenanthrene	< 330 ppb
Phorate	< 330 ppb
Pronamide	< 330 ppb
Pyrene	< 330 ppb
Pyridine	< 770 ppb
Safrole	< 330 ppb
Sulfotep	< 412 ppb
Thionazin	< 412 ppb
Toxaphene	< 412 ppb
Tributylphosphate	< 412 ppb
a-,a-Dimethylphenethylamine	< 412 ppb
alpha-BHC	< 412 ppb
beta-BHC	< 412 ppb
bis(2-Chloroethoxy)methane	< 330 ppb
bis(2-Chloroethyl) ether	< 330 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 5

Sample ID	:	HB-5C-1
Lab ID	:	9207192-02
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

bis(2-Chloroisopropyl)ether	< 330 ppb
bis(2-Ethylhexyl)phthalate	< 412 ppb
delta-BHC	< 412 ppb
gamma-BHC	< 1190 ppb
m-Dinitrobenzene	< 330 ppb
m-Nitroaniline	< 2060 ppb
o-Nitroaniline	< 330 ppb
o-Toluidine	< 330 ppb
p-Dimethylaminoazobenzene	< 412 ppb
p-Nitroaniline	< 1770 ppb
p-Phenylenediamine	< 330 ppb
sym-Trinitrobenzene	< 412 ppb

General Chemistry

Total Petroleum Hydrocarbons 21.7 ppm

The following preparation procedures were performed:

Ext. & Conc. - B/N Compounds

Sample: 9207192-02 Client ID: Matrix: Soil Description: HB-5C-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
TC: B/N EXT									
TC: EVAP LOSS									
Evaporative Loss @ 105 C	19.0	wt%	0.00	wt%	1:1		0.00	0.00%	N/C
TC: 8270 B/N									
Method: EPA 8270									
Batch: 16959									
Run Analyst: BDK									
DOA: 07/11/92									
TOA: 1200 OK									
Batch: 17692									
Run Analyst: AGW									
DOA: 07/16/92									
TOA: 1704 OK									
Prep Analyst: BDK									
DOP: 07/15/92									
TOP: 1600 NOT OK									
1,2,4,5-Tetrachlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,2,4-Trichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,2-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,3-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,4-Dichlorobenzene	0.00	ppm	<	330.	ppb	1:1	< 330.		
1,4-Dioxane	0.00	ppm	<	412.	ppb	1:1	< 412.		
1,4-Naphthoquinone	0.00	ppm	<	412.	ppb	1:1	< 412.		
1-Naphthylamine	0.00	ppm	<	330.	ppb	1:1	< 330.		
2,4-Dinitrotoluene	0.00	ppm	<	330.	ppb	1:1	< 330.	0.00%	48.0%
2,6-Dinitrotoluene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Acetylaminofluorene	0.00	ppm	<	728.	ppb	1:1	< 728.		
2-Chloronaphthalene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Fluorobiphenyl	1.48	ppb	412.	ppb	1:1	71.9%	< 412.		
2-Methylnaphthalene	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Naphthylamine	0.00	ppm	<	330.	ppb	1:1	< 330.		
2-Picoline	0.00	ppm	<	330.	ppb	1:1	< 330.		
3,3'-Dichlorobenzidine	0.00	ppm	<	660.	ppb	1:1	< 660.		
3,3'-Dimethylbenzidine	0.00	ppm	<	412.	ppb	1:1	< 412.		
3-Methylcholanthrene	0.00	ppm	<	412.	ppb	1:1	< 412.		
4,4'-DDD	0.00	ppm	<	412.	ppb	1:1	< 412.	0.00%	N/C
4,4'-ODE	0.00	ppm	<	412.	ppb	1:1	< 412.	0.00%	N/C
4,4'-DDT	0.00	ppm	<	412.	ppb	1:1	< 412.	0.00%	N/C
4-Bromophenyl phenyl ether	0.00	ppm	<	412.	ppb	1:1	< 412.		
4-Chloroaniline	0.00	ppm	<	330.	ppb	1:1	< 330.		
4-Chlorophenyl phenyl ether	0.00	ppm	<	330.	ppb	1:1	< 330.		
4-Mitroquinoline	0.00	ppm	<	1310	ppb	1:1	< 1310		
4-aminobiphenyl	0.00	ppm	<	412.	ppb	1:1	< 412.		
5-Nitro-o-toluidine	0.00	ppm	<	330.	ppb	1:1	< 330.		
7,12-Dimethylbenz(a)anthracene	0.00	ppm	<	453.	ppb	1:1		N/C	
Acenaphthene	0.00	ppm	<	330.	ppb	1:1	< 330.	0.00%	64.0%
Acenaphthylene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Acetophenone	0.00	ppm	<	330.	ppb	1:1	< 330.		
Aldrin	0.00	ppm	<	691.	ppb	1:1	< 691.	0.00%	N/C
Aniline	0.00	ppm	<	330.	ppb	1:1	< 330.		
Anthracene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Aramite	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzidine	0.00	ppm	<	412.	ppb	1:1	< 412.	0.00%	N/C
Benzo(a)anthracene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(a)pyrene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(b)fluoranthene	0.00	ppm	<	385.	ppb	1:1	< 385.		
Benzo(ghi)perylene	0.00	ppm	<	330.	ppb	1:1	< 330.		
Benzo(k)fluoranthene	0.00	ppm	<	514.	ppb	1:1	< 514.		
Benzyl Alcohol	0.00	ppm	<	330.	ppb	1:1	< 330.		
Butyl benzyl phthalate	0.00	ppm	<	330.	ppb	1:1	< 330.		
Chlordane	0.00	ppm	<	412.	ppb	1:1	< 412.	0.00%	N/C
Chlorobenzilate	0.00	ppm	<	330.	ppb	1:1	< 330.		
Chrysene	0.00	ppm	<	412.	ppb	1:1	< 412.		
Di-n-butyl phthalate	0.00	ppm	<	412.	ppb	1:1	< 412.		
Di-n-octyl phthalate	0.00	ppm	<	412.	ppb	1:1	< 412.		

Sample: 9207192-02 Client ID: Matrix: Soil Description: HB-SC-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	#Rec
Diallate	0.00	ppm <	330.	ppb	1:1		< 330.		
Dibenzo(a,h)anthracene	0.00	ppm <	330.	ppb	1:1		< 330.		
Dibenzofuran	0.00	ppm <	330.	ppb	1:1		< 330.		
Dieldrin	0.00	ppm <	753.	ppb	1:1		< 753.	0.00%	N/C
Diethyl phthalate	0.00	ppm <	330.	ppb	1:1		< 330.		
Dimethoate	0.00	ppm <	330.	ppb	1:1		< 330.		
Dimethyl phthalate	0.00	ppm <	330.	ppb	1:1		< 330.		
Diphenylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
Disulfoton	0.00	ppm <	412.	ppb	1:1		< 412.		
Endosulfan I	0.00	ppm <	412.	ppb	1:1		< 412.	0.00%	N/C
Endosulfan II	0.00	ppm <	412.	ppb	1:1		< 412.	0.00%	N/C
Endosulfan sulfate	0.00	ppm <	733.	ppb	1:1		< 733.	0.00%	N/C
Eadrin	0.00	ppm <	774.	ppb	1:1		< 774.	0.00%	N/C
Eadrin aldehyde	0.00	ppm <	1410	ppb	1:1		< 1410	0.00%	N/C
Ethyl Methanesulfonate	0.00	ppm <	412.	ppb	1:1		< 412.		
Faaphur	0.00	ppm <	330.	ppb	1:1		< 330.		
Fluoranthene	0.00	ppm <	330.	ppb	1:1		< 330.		
Fluorene	0.00	ppm <	330.	ppb	1:1		< 330.		
Heptachlor	0.00	ppm <	918.	ppb	1:1		< 918.	0.00%	N/C
Heptachlor epoxide	0.00	ppm <	411.	ppb	1:1		< 411.	0.00%	N/C
Hexachlorobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachlorobutadiene	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachlorocyclopentadiene	0.00	ppm <	449.	ppb	1:1		< 449.		
Hexachloroethane	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachloropropene	0.00	ppm <	330.	ppb	1:1		< 330.		
Indeno(1,2,3-c,d)pyrene	0.00	ppm <	412.	ppb	1:1		< 412.		
Isodrin	0.00	ppm <	330.	ppb	1:1		< 330.		
Isophorone	0.00	ppm <	330.	ppb	1:1		< 330.		
Isosafrole	0.00	ppm <	330.	ppb	1:1		< 330.		
Kepone	0.00	ppm <	330.	ppb	1:1		< 330.		
Methapyrilene	0.00	ppm <	330.	ppb	1:1		< 330.		
Methyl Methanesulfonate	0.00	ppm <	412.	ppb	1:1		< 412.		
M-Mitrosodi-n-butylamine	0.00	ppm <	412.	ppb	1:1		< 412.		
M-Mitrosodiethylamine	0.00	ppm <	412.	ppb	1:1		< 412.		
M-Mitrosodimethylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
M-Mitrosodiphenylamine	0.00	ppm <	412.	ppb	1:1		< 412.		
M-Mitrosodipropylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
M-Mitrosomethyl ethylamine	0.00	ppm <	2880	ppb	1:1		< 2880		
M-Nitrosomorpholine	0.00	ppm <	330.	ppb	1:1		< 330.		
M-Nitrosopiperidine	0.00	ppm <	330.	ppb	1:1		< 330.		
M-Nitrosopyrrolidine	0.00	ppm <	330.	ppb	1:1		< 330.		
Naphthalene	0.00	ppm <	330.	ppb	1:1		< 330.		
Nitrobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Nitrobenzene-d5	1.32	ppb	412.	ppb	1:1	64.2%	< 412.		
O,O,O-Triethylphosphorothioic acid	0.00	ppm <	412.	ppb	1:1			N/C	
Parathion, methyl	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachlorobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachloroethane	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachloronitrobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Phenacetin	0.00	ppm <	330.	ppb	1:1		< 330.		
Phenanthrene	0.00	ppm <	330.	ppb	1:1		< 330.		
Phorate	0.00	ppm <	330.	ppb	1:1		< 330.		
Pronamide	0.00	ppm <	330.	ppb	1:1		< 330.		
Pyrene	0.00	ppm <	330.	ppb	1:1		< 330.	0.00%	68.0%

Sample: 9207192-02 Client ID: Matrix: Soil Description: MB-5C-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Pyridine	0.00	ppm	< 770.	ppb	1:1		< 770.		
Safrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Sulfotep	0.00	ppm	< 412.	ppb	1:1		< 412.		
Thionazin	0.00	ppm	< 412.	ppb	1:1		< 412.		
Toxaphene	0.00	ppm	< 412.	ppb	1:1		< 412.	0.00%	N/C
Tributylphosphate	0.00	ppm	< 412.	ppb	1:1		< 412.		
a-,a-Dimethylphenethylamine	0.00	ppm	< 412.	ppb	1:1		< 412.		
alpha-BHC	0.00	ppm	< 412.	ppb	1:1		< 412.	0.00%	N/C
beta-BHC	0.00	ppm	< 412.	ppb	1:1		< 412.	0.00%	N/C
bis(2-Chloroethoxy)methane	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroethyl) ether	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroisopropyl)ether	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	N/C
bis(2-Ethylhexyl)phthalate	0.00	ppm	< 412.	ppb	1:1		< 412.		
delta-BHC	0.00	ppm	< 412.	ppb	1:1		< 412.	0.00%	N/C
gamma-BHC	0.00	ppm	< 1190	ppb	1:1		< 1190	0.00%	N/C
m-Dinitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
n-Mitroaniline	0.00	ppm	< 2060	ppb	1:1		< 2060		
o-Mitroaniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
o-Toluidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Dimethylaminoazobenzene	0.00	ppm	< 412.	ppb	1:1		< 412.		
p-Mitroaniline	0.00	ppm	< 1770	ppb	1:1		< 1770		
p-Phenylenediamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Terphenyl-d14	1.69	ppb	412.	ppb	1:1	82.1%	< 412.		
syn-Trinitrobenzene	0.00	ppm	< 412.	ppb	1:1		< 412.		
Total TPH-9073	Method: EPA 9073						Batch: 17388 Run Analyst: SJ DOA: 07/23/92 TOA: 1200 OK		
Total Petroleum Hydrocarbons	21.7	ppm	10.0	ppm	1:1		< 10.0	2.16%	103%



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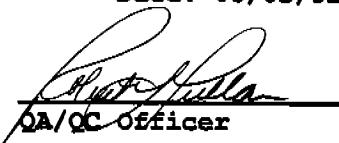
CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

Released by:


QA/QC Officer

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 1

Sample ID	:	HB-5A-1
Lab ID	:	9207192-01
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Organic Prep

Evaporative Loss @ 105 C

17.0 wt%

Extractable Organics

Method 8270 Base/Neutral Compounds

1,2,4,5-Tetrachlorobenzene	< 330 ppb
1,2,4-Trichlorobenzene	< 330 ppb
1,2-Dichlorobenzene	< 330 ppb
1,3-Dichlorobenzene	< 330 ppb
1,4-Dichlorobenzene	< 330 ppb
1,4-Dioxane	< 402 ppb
1,4-Naphthoquinone	< 402 ppb
1-Naphthylamine	< 330 ppb
2,4-Dinitrotoluene	< 330 ppb
2,6-Dinitrotoluene	< 330 ppb
2-Acetylaminofluorene	< 711 ppb
2-Chloronaphthalene	< 330 ppb
2-Methylnaphthalene	< 330 ppb
2-Naphthylamine	< 330 ppb
2-Picoline	< 330 ppb
3,3'-Dichlorobenzidine	< 660 ppb
3,3'-Dimethylbenzidine	< 402 ppb
3-Methylcholanthrene	< 402 ppb
4,4'-DDD	< 402 ppb
4,4'-DDE	< 402 ppb
4,4'-DDT	< 402 ppb
4-Bromophenyl phenyl ether	< 402 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 2

Sample ID	:	HB-5A-1
Lab ID	:	9207192-01
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

4-Chloroaniline	< 330 ppb
4-Chlorophenyl phenyl ether	< 330 ppb
4-Nitroquinoline	< 1280 ppb
4-aminobiphenyl	< 402 ppb
5-Nitro-o-toluidine	< 330 ppb
7,12-Dimethylbenz(a)anthracene	< 442 ppb
Acenaphthene	< 330 ppb
Acenaphthylene	< 330 ppb
Acetophenone	< 330 ppb
Aldrin	< 675 ppb
Aniline	< 330 ppb
Anthracene	< 330 ppb
Aramite	< 330 ppb
Benzidine	< 402 ppb
Benzo (a)anthracene	< 330 ppb
Benzo (a)pyrene	< 330 ppb
Benzo (b)fluoranthene	< 376 ppb
Benzo (ghi)perylene	< 330 ppb
Benzo (k)fluoranthene	< 502 ppb
Benzyl Alcohol	< 330 ppb
Butyl benzyl phthalate	< 330 ppb
Chlordane	< 402 ppb
Chlorobenzilate	< 330 ppb
Chrysene	< 402 ppb
Di-n-butyl phthalate	< 402 ppb
Di-n-octyl phthalate	< 402 ppb
Diallate	< 330 ppb
Dibenzo (a,h)anthracene	< 330 ppb
Dibenzofuran	< 330 ppb
Dieldrin	< 735 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 3

Sample ID	:	HB-5A-1
Lab ID	:	9207192-01
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Diethyl phthalate	< 330 ppb
Dimethoate	< 330 ppb
Dimethyl phthalate	< 330 ppb
Diphenylamine	< 330 ppb
Disulfoton	< 402 ppb
Endosulfan I	< 402 ppb
Endosulfan II	< 402 ppb
Endosulfan sulfate	< 715 ppb
Endrin	< 755 ppb
Endrin aldehyde	< 1370 ppb
Ethyl Methanesulfonate	< 402 ppb
Famphur	< 330 ppb
Fluoranthene	< 330 ppb
Fluorene	< 330 ppb
Heptachlor	< 896 ppb
Heptachlor epoxide	< 401 ppb
Hexachlorobenzene	< 330 ppb
Hexachlorobutadiene	< 330 ppb
Hexachlorocyclopentadiene	< 438 ppb
Hexachloroethane	< 330 ppb
Hexachloropropene	< 330 ppb
Indeno(1,2,3-c,d)pyrene	< 402 ppb
Isodrin	< 330 ppb
Isophorone	< 330 ppb
Isosafrole	< 330 ppb
Kepone	< 330 ppb
Methapyrilene	< 330 ppb
Methyl Methanesulfonate	< 402 ppb
N-Nitrosodi-n-butylamine	< 402 ppb
N-Nitrosodiethylamine	< 402 ppb



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TN	02934
WI	99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 4

Sample ID	:	HB-5A-1
Lab ID	:	9207192-01
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

N-Nitrosodimethylamine	< 330 ppb
N-Nitrosodiphenylamine	< 402 ppb
N-Nitrosodipropylamine	< 330 ppb
N-Nitrosomethylethylamine	< 2810 ppb
N-Nitrosomorpholine	< 330 ppb
N-Nitrosopiperidine	< 330 ppb
N-Nitrosopyrrolidine	< 330 ppb
Naphthalene	< 330 ppb
Nitrobenzene	< 330 ppb
O,O,O-Triethylphosphorothioate	< 402 ppb
Parathion, methyl	< 330 ppb
Pentachlorobenzene	< 330 ppb
Pentachloroethane	< 330 ppb
Pentachloronitrobenzene	< 330 ppb
Phenacetin	< 330 ppb
Phenanthrene	< 330 ppb
Phorate	< 330 ppb
Pronamide	< 330 ppb
Pyrene	< 330 ppb
Pyridine	< 751 ppb
Safrole	< 330 ppb
Sulfotep	< 402 ppb
Thionazin	< 402 ppb
Toxaphene	< 402 ppb
Tributylphosphate	< 402 ppb
a-,a-Dimethylphenethylamine	< 402 ppb
alpha-BHC	< 402 ppb
beta-BHC	< 402 ppb
bis(2-Chloroethoxy)methane	< 330 ppb
bis(2-Chloroethyl) ether	< 330 ppb



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WI 99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 5

Sample ID	:	HB-5A-1
Lab ID	:	9207192-01
Matrix	:	Soil
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

bis(2-Chloroisopropyl)ether	< 330 ppb
bis(2-Ethylhexyl)phthalate	1490 ppb
delta-BHC	< 402 ppb
gamma-BHC	< 1160 ppb
m-Dinitrobenzene	< 330 ppb
m-Nitroaniline	< 2010 ppb
o-Nitroaniline	< 330 ppb
o-Toluidine	< 330 ppb
p-Dimethylaminoazobenzene	< 402 ppb
p-Nitroaniline	< 1730 ppb
p-Phenylenediamine	< 330 ppb
Sym-Trinitrobenzene	< 402 ppb

General Chemistry

Total Petroleum Hydrocarbons 30.6 ppm

The following preparation procedures were performed:

Ext. & Conc. - B/N Compounds

Sample: 9207192-01 Client ID: Matrix: Soil Description: H8-5A-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
TC: B/N EXT									
TC: EVAP LOSS									
Evaporative Loss @ 105 C	17.0	wt%	0.00	wt%	1:1	0.00	0.00%	N/C	
TC: 8270 B/N									
Method: EPA 8270									
Batch: 16959									
Run Analyst: 80K									
DOA: 07/11/92									
TOA: 1200									
Batch: 17692									
Run Analyst: AGW									
DOA: 07/16/92									
TOA: 1612									
Prep Analyst: 80K									
DOP: 07/15/92									
TOP: 1600									
NOT OK									
1,2,4,5-Tetrachlorobenzene	0.00	ppm	< 330.	ppb	1:1	(330.			
1,2,4-Trichlorobenzene	0.00	ppm	< 330.	ppb	1:1	(330.			
1,2-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1	(330.			
1,3-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1	(330.			
1,4-Dichlorobenzene	0.00	ppm	< 330.	ppb	1:1	(330.			
1,4-Dioxane	0.00	ppm	< 402.	ppb	1:1	(402.			
1,4-Naphthoquinone	0.00	ppm	< 402.	ppb	1:1	(402.			
1-Naphthylamine	0.00	ppm	< 330.	ppb	1:1	(330.			
2,4-Dinitrotoluene	0.00	ppm	< 330.	ppb	1:1	(330.	0.00%	48.0%	
2,6-Dinitrotoluene	0.00	ppm	< 330.	ppb	1:1	(330.			
2-Acetylaminofluorene	0.00	ppm	< 711.	ppb	1:1	(711.			
2-Chloronaphthalene	0.00	ppm	< 330.	ppb	1:1	(330.			
2-Fluorobiphenyl	1.33	ppb	402.	ppb	1:1	66.2%	(402.		
2-Methylnaphthalene	0.00	ppm	< 330.	ppb	1:1	(330.			
2-Naphthylamine	0.00	ppm	< 330.	ppb	1:1	(330.			
2-Picoline	0.00	ppm	< 330.	ppb	1:1	(330.			
3,3'-Dichlorobenzidine	0.00	ppm	< 660.	ppb	1:1	(660.			
3,3'-Dimethylbenzidine	0.00	ppm	< 402.	ppb	1:1	(402.			
3-Methylcholanthrene	0.00	ppm	< 402.	ppb	1:1	(402.			
4,4'-DDB	0.00	ppm	< 402.	ppb	1:1	(402.	0.00%	N/C	
4,4'-DDE	0.00	ppm	< 402.	ppb	1:1	(402.	0.00%	N/C	
4,4'-DDT	0.00	ppm	< 402.	ppb	1:1	(402.	0.00%	N/C	
4-Bromophenyl phenyl ether	0.00	ppm	< 402.	ppb	1:1	(402.			
4-Chloroaniline	0.00	ppm	< 330.	ppb	1:1	(330.			
4-Chlorophenyl phenyl ether	0.00	ppm	< 330.	ppb	1:1	(330.			
4-Nitroquinoline	0.00	ppm	< 1280	ppb	1:1	(1280			
4-aminobiphenyl	0.00	ppm	< 402.	ppb	1:1	(402.			
5-Nitro-o-toluidine	0.00	ppm	< 330.	ppb	1:1	(330.			
7,12-Dimethylbenz(a)anthracene	0.00	ppm	< 442.	ppb	1:1	(N/C			
Acenaphthene	0.00	ppm	< 330.	ppb	1:1	(330.	0.00%	64.0%	
Acenaphthylene	0.00	ppm	< 330.	ppb	1:1	(330.			
Acetophenone	0.00	ppm	< 330.	ppb	1:1	(330.			
Aldrin	0.00	ppm	< 675.	ppb	1:1	(675.	0.00%	N/C	
Aniline	0.00	ppm	< 330.	ppb	1:1	(330.			
Anthracene	0.00	ppm	< 330.	ppb	1:1	(330.			
Aramite	0.00	ppm	< 330.	ppb	1:1	(330.			
Benzidine	0.00	ppm	< 402.	ppb	1:1	(402.	0.00%	N/C	
Benzo(a)anthracene	0.00	ppm	< 330.	ppb	1:1	(330.			
Benzo(a)pyrene	0.00	ppm	< 330.	ppb	1:1	(330.			
Benzo(b)fluoranthene	0.00	ppm	< 376.	ppb	1:1	(376.			
Benzo(ghi)perylene	0.00	ppm	< 330.	ppb	1:1	(330.			
Benzo(k)fluoranthene	0.00	ppm	< 502.	ppb	1:1	(502.			
Benzyl Alcohol	0.00	ppm	< 330.	ppb	1:1	(330.			
Butyl benzyl phthalate	0.00	ppm	< 330.	ppb	1:1	(330.			
Chlordane	0.00	ppm	< 402.	ppb	1:1	(402.	0.00%	N/C	
Chlorobenzilate	0.00	ppm	< 330.	ppb	1:1	(330.			
Chrysene	0.00	ppm	< 402.	ppb	1:1	(402.			
Di-n-butyl phthalate	0.00	ppm	< 402.	ppb	1:1	(402.			
Di-n-octyl phthalate	0.00	ppm	< 402.	ppb	1:1	(402.			

Sample: 9207192-01 Client ID: Matrix: Soil Description: HB-5A-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLR00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	\$Rec
Diallate	0.00	ppm <	330.	ppb	1:1		< 330.		
Oibenzo(a,h)anthracene	0.00	ppm <	330.	ppb	1:1		< 330.		
Oibenzofuran	0.00	ppm <	330.	ppb	1:1		< 330.		
Oieldrin	0.00	ppm <	735.	ppb	1:1		< 735.	0.00%	N/C
Diethyl phthalate	0.00	ppm <	330.	ppb	1:1		< 330.		
Dimethoate	0.00	ppm <	330.	ppb	1:1		< 330.		
Dimethyl phthalate	0.00	ppm <	330.	ppb	1:1		< 330.		
Diphenylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
Disulfoton	0.00	ppm <	402.	ppb	1:1		< 402.		
Endosulfan I	0.00	ppm <	402.	ppb	1:1		< 402.	0.00%	N/C
Endosulfan II	0.00	ppm <	402.	ppb	1:1		< 402.	0.00%	N/C
Endosulfan sulfate	0.00	ppm <	715.	ppb	1:1		< 715.	0.00%	N/C
Endrin	0.00	ppm <	755.	ppb	1:1		< 755.	0.00%	N/C
Endrin aldehyde	0.00	ppm <	1370	ppb	1:1		< 1370	0.00%	N/C
Ethyl Methanesulfonate	0.00	ppm <	402.	ppb	1:1		< 402.		
Famphur	0.00	ppm <	330.	ppb	1:1		< 330.		
Fluoranthene	0.00	ppm <	330.	ppb	1:1		< 330.		
Fluorene	0.00	ppm <	330.	ppb	1:1		< 330.		
Heptachlor	0.00	ppm <	896.	ppb	1:1		< 896.	0.00%	N/C
Heptachlor epoxide	0.00	ppm <	401.	ppb	1:1		< 401.	0.00%	N/C
Hexachlorobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachlorobutadiene	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachlorocyclopentadiene	0.00	ppm <	438.	ppb	1:1		< 438.		
Hexachloroethane	0.00	ppm <	330.	ppb	1:1		< 330.		
Hexachloropropene	0.00	ppm <	330.	ppb	1:1		< 330.		
Indeno(1,2,3-c,d)pyrene	0.00	ppm <	402.	ppb	1:1		< 402.		
Isodrin	0.00	ppm <	330.	ppb	1:1		< 330.		
Isophorone	0.00	ppm <	330.	ppb	1:1		< 330.		
Isosafrole	0.00	ppm <	330.	ppb	1:1		< 330.		
Kepone	0.00	ppm <	330.	ppb	1:1		< 330.		
Methapyrilene	0.00	ppm <	330.	ppb	1:1		< 330.		
Methyl Methanesulfonate	0.00	ppm <	402.	ppb	1:1		< 402.		
N-Nitrosodi-n-butylamine	0.00	ppm <	402.	ppb	1:1		< 402.		
N-Nitrosodiethylamine	0.00	ppm <	482.	ppb	1:1		< 482.		
N-Nitrosodimethylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
N-Nitrosodiphenylamine	0.00	ppm <	402.	ppb	1:1		< 402.		
N-Nitrosodipropylamine	0.00	ppm <	330.	ppb	1:1		< 330.		
N-Nitrosomethylalkylamine	0.00	ppm <	2810	ppb	1:1		< 2810		
N-Nitrosomorpholine	0.00	ppm <	330.	ppb	1:1		< 330.		
N-Nitrosopiperidine	0.00	ppm <	330.	ppb	1:1		< 330.		
N-Nitrosopyrrolidine	0.00	ppm <	330.	ppb	1:1		< 330.		
Maphthalene	0.00	ppm <	330.	ppb	1:1		< 330.		
Nitrobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Nitrobenzene-d5	1.12	ppb	402.	ppb	1:1	55.8%	< 402.		
O,O,O-Triethylphosphorothioa	0.00	ppm <	402.	ppb	1:1			N/C	
Parathion, methyl	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachlorobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachloroethane	0.00	ppm <	330.	ppb	1:1		< 330.		
Pentachloronitrobenzene	0.00	ppm <	330.	ppb	1:1		< 330.		
Phenacetin	0.00	ppm <	330.	ppb	1:1		< 330.		
Phenanthrene	0.00	ppm <	330.	ppb	1:1		< 330.		
Phorate	0.00	ppm <	330.	ppb	1:1		< 330.		
Pronamide	0.00	ppm <	330.	ppb	1:1		< 330.		
Pyrene	0.00	ppm <	330.	ppb	1:1		< 330.	0.00%	68.0%

Sample: 9207192-01 Client ID: Matrix: Soil Description: WB-SA-1
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRM00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Pyridine	0.00	ppm	< 751.	ppb	1:1		< 751.		
Safrole	0.00	ppm	< 330.	ppb	1:1		< 330.		
Sulfotep	0.00	ppm	< 402.	ppb	1:1		< 402.		
Thionazin	0.00	ppm	< 402.	ppb	1:1		< 402.		
Toxaphene	0.00	ppm	< 402.	ppb	1:1		< 402.	0.00%	N/C
Tributylphosphate	0.00	ppm	< 402.	ppb	1:1		< 402.		
<i>a</i> - <i>a</i> -Dimethylphenethylamine	0.00	ppm	< 402.	ppb	1:1		< 402.		
alpha-BHC	0.00	ppm	< 402.	ppb	1:1		< 402.	0.00%	N/C
beta-BHC	0.00	ppm	< 402.	ppb	1:1		< 402.	0.00%	N/C
bis(2-Chloroethoxy)methane	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroethyl) ether	0.00	ppm	< 330.	ppb	1:1		< 330.		
bis(2-Chloroisopropyl)ether	0.00	ppm	< 330.	ppb	1:1		< 330.	0.00%	N/C
bis(2-Ethylhexyl)phthalate	1.49	ppm	< 402.	ppb	1:1		< 402.		
delta-BHC	0.00	ppm	< 402.	ppb	1:1		< 402.	0.00%	N/C
gamma-BHC	0.00	ppm	< 1160	ppb	1:1		< 1160	0.00%	N/C
<i>m</i> -Dinitrobenzene	0.00	ppm	< 330.	ppb	1:1		< 330.		
<i>m</i> -Nitroaniline	0.00	ppm	< 2010	ppb	1:1		< 2010		
<i>o</i> -Nitroaniline	0.00	ppm	< 330.	ppb	1:1		< 330.		
<i>o</i> -Toluidine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Dimethylaminoazobenzene	0.00	ppm	< 402.	ppb	1:1		< 402.		
p-Nitroaniline	0.00	ppm	< 1730	ppb	1:1		< 1730		
p-Phenylenediamine	0.00	ppm	< 330.	ppb	1:1		< 330.		
p-Terphenyl-d14	1.49	ppb	402.	ppb	1:1	74.2%	< 402.		
sym-Trinitrobenzene	0.00	ppm	< 402.	ppb	1:1		< 402.		
TC: TPH-9073	Method: EPA 9073						Batch: 17388 Run Analyst: SJ DDA: 07/23/92 TAA: 1200 OK		
Total Petroleum Hydrocarbons	30.6	ppm	10.0	ppm	1:1		< 10.0	2.16%	103%



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Laboratory Certifications:	
FL	E87156/87294
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SC	10120
VA	00151
TN	02934
WI	99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

Released by:

Robert Hub
QA/QC Officer

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 1

Sample ID	:	FB070792
Lab ID	:	9207192-05
Matrix	:	GroundH2O
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Extractable Organics

Method 8270 Base/Neutral Compounds

1,2,4,5-Tetrachlorobenzene	< 10.0 ppb
1,2,4-Trichlorobenzene	< 10.0 ppb
1,2-Dichlorobenzene	< 10.0 ppb
1,3-Dichlorobenzene	< 10.0 ppb
1,4-Dichlorobenzene	< 10.0 ppb
1,4-Dioxane	< 10.0 ppb
1,4-Naphthoquinone	< 10.0 ppb
1-Naphthylamine	< 10.0 ppb
2,4-Dinitrotoluene	< 10.0 ppb
2,6-Dinitrotoluene	< 10.0 ppb
2-Acetylaminofluorene	< 10.8 ppb
2-Chloronaphthalene	< 10.0 ppb
2-Methylnaphthalene	< 10.0 ppb
2-Naphthylamine	< 10.0 ppb
2-Picoline	< 10.0 ppb
3,3'-Dichlorobenzidine	< 20.0 ppb
3,3'-Dimethylbenzidine	< 10.0 ppb
3-Methylcholanthrene	< 10.0 ppb
4,4'-DDD	< 10.0 ppb
4,4'-DDE	< 10.0 ppb
4,4'-DDT	< 10.0 ppb
4-Bromophenyl phenyl ether	< 10.0 ppb
4-Chloroaniline	< 10.0 ppb
4-Chlorophenyl phenyl ether	< 10.0 ppb
4-Nitroquinoline	< 19.5 ppb



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Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 2

Sample ID	:	FB070792
Lab ID	:	9207192-05
Matrix	:	GroundH2O
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

4-aminobiphenyl	< 10.0 ppb
5-Nitro-o-toluidine	< 10.0 ppb
7,12-Dimethylbenz(a)anthracene	< 10.0 ppb
Acenaphthene	< 10.0 ppb
Acenaphthylene	< 10.0 ppb
Acetophenone	< 10.0 ppb
Aldrin	< 10.3 ppb
Aniline	< 10.0 ppb
Anthracene	< 10.0 ppb
Aramite	< 10.2 ppb
Benzidine	< 10.0 ppb
Benzo(a)anthracene	< 10.0 ppb
Benzo(a)pyrene	< 10.0 ppb
Benzo(b)fluoranthene	< 10.0 ppb
Benzo(ghi)perylene	< 10.0 ppb
Benzo(k)fluoranthene	< 10.0 ppb
Benzyl Alcohol	< 10.0 ppb
Butyl benzyl phthalate	< 10.0 ppb
Chlordane	< 10.0 ppb
Chlorobenzilate	< 10.0 ppb
Chrysene	< 10.0 ppb
Di-n-butyl phthalate	< 10.0 ppb
Di-n-octyl phthalate	< 10.0 ppb
Diallate	< 10.0 ppb
Dibenzo(a,h)anthracene	< 10.0 ppb
Dibenzofuran	< 10.0 ppb
Dieldrin	< 11.2 ppb
Diethyl phthalate	< 10.0 ppb
Dimethoate	< 10.0 ppb
Dimethyl phthalate	< 10.0 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 3

Sample ID	:	FB070792
Lab ID	:	9207192-05
Matrix	:	GroundH ₂ O
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

Diphenylamine	< 10.0 ppb
Disulfoton	< 10.0 ppb
Endosulfan I	< 10.0 ppb
Endosulfan II	< 10.0 ppb
Endosulfan sulfate	< 10.9 ppb
Endrin	< 11.5 ppb
Endrin aldehyde	< 20.9 ppb
Ethyl Methanesulfonate	< 10.0 ppb
Fämphur	< 10.0 ppb
Fluoranthene	< 10.0 ppb
Fluorene	< 10.0 ppb
Heptachlor	< 13.7 ppb
Heptachlor epoxide	< 10.0 ppb
Hexachlorobenzene	< 10.0 ppb
Hexachlorobutadiene	< 10.0 ppb
Hexachlorocyclopentadiene	< 10.0 ppb
Hexachloroethane	< 10.0 ppb
Hexachloropropene	< 10.0 ppb
Indeno(1,2,3-c,d)pyrene	< 10.0 ppb
Isodrin	< 10.0 ppb
Isophorone	< 10.0 ppb
Isosafrole	< 10.0 ppb
Kepone	< 10.0 ppb
Methapyrilene	< 10.0 ppb
Methyl Methanesulfonate	< 10.0 ppb
N-Nitrosodi-n-butylamine	< 10.0 ppb
N-Nitrosodiethylamine	< 10.0 ppb
N-Nitrosodimethylamine	< 10.0 ppb
N-Nitrosodiphenylamine	< 10.0 ppb
N-Nitrosodipropylamine	< 10.0 ppb



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CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191 Project Manager: Winter Seibert

Page No.: 4

Sample ID	:	FB070792
Lab ID	:	9207192-05
Matrix	:	GroundH2O
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

N-Nitrosomethylmethamphetamine	< 42.9 ppb
N-Nitrosomorpholine	< 10.0 ppb
N-Nitrosopiperidine	< 10.0 ppb
N-Nitrosopyrrolidine	< 10.0 ppb
Naphthalene	< 10.0 ppb
Nitrobenzene	< 10.0 ppb
O,O,O-Triethylphosphorothioate	< 10.0 ppb
Parathion, methyl	< 10.0 ppb
Pentachlorobenzene	< 10.0 ppb
Pentachloroethane	< 10.0 ppb
Pentachloronitrobenzene	< 10.0 ppb
Phenacetin	< 10.0 ppb
Phenanthrene	< 10.0 ppb
Phorate	< 10.2 ppb
Pronamide	< 10.0 ppb
Pyrene	< 10.0 ppb
Pyridine	< 11.4 ppb
Safrole	< 10.0 ppb
Sulfotep	< 10.0 ppb
Thionazin	< 10.0 ppb
Toxaphene	< 10.0 ppb
Tributylphosphate	< 10.0 ppb
a-,a-Dimethylphenethylamine	< 10.0 ppb
alpha-BHC	< 10.0 ppb
beta-BHC	< 10.0 ppb
bis(2-Chloroethoxy)methane	< 10.0 ppb
bis(2-Chloroethyl) ether	< 10.0 ppb
bis(2-Chloroisopropyl)ether	< 10.0 ppb
bis(2-Ethylhexyl)phthalate	11.2 ppb
delta-BHC	< 10.0 ppb



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VA	00151
TN	02934
WI	99988779

CERTIFICATE OF ANALYSIS

Client: McLaren/Hart
25 Independence Boulevard
Warren, New Jersey 07059

Date: 08/03/92

Contact: Mr. Sid Syedali

cc: MLRN00191

Project Manager: Winter Seibert

Page No.: 5

Sample ID	:	FB070792
Lab ID	:	9207192-05
Matrix	:	GroundH ₂ O
Date Collected	:	07/07/92
Date Received	:	07/09/92
Priority	:	Routine
Collector	:	Client

gamma-BHC	< 17.7 ppb
m-Dinitrobenzene	< 10.0 ppb
m-Nitroaniline	< 30.6 ppb
o-Nitroaniline	< 10.0 ppb
o-Toluidine	< 10.0 ppb
p-Dimethylaminoazobenzene	< 10.0 ppb
p-Nitroaniline	< 26.3 ppb
p-Phenylenediamine	< 10.0 ppb
Sym-Trinitrobenzene	< 10.0 ppb

General Chemistry

Total Petroleum Hydrocarbons < 1.00 ppm

The following preparation procedures were performed:

Ext. & Conc. - B/N Compounds

Sample: 9207192-05 Client ID: Matrix: GroundH2O Description: f8070792
Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Sur. %	Blank	RPD	%Rec
TC: B/N EXT									
TC: 8270 B/N	Method:								
	Method:								
1,2,4,5-Tetrachlorobenzene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,2,4-Trichlorobenzene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,2-Dichlorobenzene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,3-Dichlorobenzene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,4-Dichlorobenzene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,4-Dioxane	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1,4-Naphthoquinone	0.00	ppm <	10.0	ppb	1:1	< 10.0			
1-Naphthylamine	0.00	ppm <	10.0	ppb	1:1	< 10.0			
2,4-Dinitrotoluene	0.00	ppm <	10.0	ppb	1:1	< 10.0		1.75%	56.0%
2,6-Dinitrotoluene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
2-Acetylaminofluorene	0.00	ppm <	10.8	ppb	1:1	< 10.8			
2-Chloronaphthalene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
2-Fluorobiphenyl	0.0520	ppm	0.00	ppm	1:1	102%	0.0460		
2-Methylnaphthalene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
2-Naphthylamine	0.00	ppm <	10.0	ppb	1:1	< 10.0			
2-Picoline	0.00	ppm <	10.0	ppb	1:1	< 10.0			
3,3'-Dichlorobenzidine	0.00	ppm <	20.0	ppb	1:1	< 20.0			
3,3'-Dimethylbenzidine	0.00	ppm <	10.0	ppb	1:1	< 10.0			
3-Methylcholanthrene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
4,4'-DDO	0.00	ppm <	10.0	ppb	1:1	< 10.0		0.00%	N/C
4,4'-ODE	0.00	ppm <	10.0	ppb	1:1	< 10.0		0.00%	N/C
4,4'-DDT	0.00	ppm <	10.0	ppb	1:1	< 10.0		0.00%	N/C
4-Bromophenyl phenyl ether	0.00	ppm <	10.0	ppb	1:1	< 10.0			
4-Chloroaniline	0.00	ppm <	10.0	ppb	1:1	< 10.0			
4-Chlorophenyl phenyl ether	0.00	ppm <	10.0	ppb	1:1	< 10.0			
4-Nitroquinoline	0.00	ppm <	19.5	ppb	1:1	< 19.5			
4-aminobiphenyl	0.00	ppm <	10.0	ppb	1:1	< 10.0			
5-Nitro-o-toluidine	0.00	ppm <	10.0	ppb	1:1	< 10.0			
7,12-Dimethylbenz(a)anthracene	0.00	ppm <	10.0	ppb	1:1	N/C			
Acenaphthene	0.00	ppm <	10.0	ppb	1:1	< 10.0		1.12%	88.0%
Acenaphthylene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Acetophenone	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Aldrin	0.00	ppm <	10.3	ppb	1:1	< 10.3		0.00%	N/C
Aniline	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Anthracene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Aramite	0.00	ppm <	10.2	ppb	1:1	< 10.2			
Benzidine	0.00	ppm <	10.0	ppb	1:1	< 10.0		0.00%	N/C
Benzo(a)anthracene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Benzo(a)pyrene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Benzo(b)fluoranthene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Benzo(ghi)perylene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Benzo(k)fluoranthene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Benzyl Alcohol	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Butyl benzyl phthalate	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Chlordane	0.00	ppm <	10.0	ppb	1:1	< 10.0		0.00%	N/C
Chlorobenzilate	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Chrysene	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Di-n-butyl phthalate	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Di-n-octyl phthalate	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Diallate	0.00	ppm <	10.0	ppb	1:1	< 10.0			
Dibenzo(a,h)anthracene	0.00	ppm <	10.0	ppb	1:1	< 10.0			

Sample: 9207192-05 Client ID: Matrix: GroundH2O Description: FB070792
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRN00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Dibenzofuran	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Dieldrin	0.00	ppm < 11.2	ppb	1:1	< 11.2	0.00%	N/C		
Diethyl phthalate	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Dimethoate	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Dimethyl phthalate	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Diphenylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Disulfoton	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Endosulfan I	0.00	ppm < 10.0	ppb	1:1	< 10.0	0.00%	N/C		
Endosulfan II	0.00	ppm < 10.0	ppb	1:1	< 10.0	0.00%	N/C		
Endosulfan sulfate	0.00	ppm < 10.9	ppb	1:1	< 10.9	0.00%	N/C		
Endrin	0.00	ppm < 11.5	ppb	1:1	< 11.5	0.00%	N/C		
Endrin aldehyde	0.00	ppm < 20.9	ppb	1:1	< 20.9	0.00%	N/C		
Ethyl Methanesulfonate	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Famphur	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Fluoranthene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Fluorene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Heptachlor	0.00	ppm < 13.7	ppb	1:1	< 13.7	0.00%	N/C		
Heptachlor epoxide	0.00	ppm < 10.0	ppb	1:1	< 10.0	0.00%	N/C		
Hexachlorobenzene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Hexachlorobutadiene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Hexachlorocyclopentadiene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Hexachloroethane	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Hexachloropropene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Indeno(1,2,3-c,d)pyrene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Isodrin	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Isophorone	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Isosafrole	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Kepone	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Methapyrilene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Methyl Methanesulfonate	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosodi-n-butylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosodiethylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosodimethylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosodiphenylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosodipropylamine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosomethylethyldamine	0.00	ppm < 42.9	ppb	1:1	< 42.9				
N-Nitrosomorpholine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosopiperidine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
N-Nitrosopyrrolidine	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Mapthalene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Mitrobenzene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Mitrobenzene-d5	0.0388	ppm 0.00	ppm	1:1	76.0%	0.0350			
O,O,O-Triethylphosphorothioa	0.00	ppm < 10.0	ppb	1:1		N/C			
Parathion, methyl	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Pentachlorobenzene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Pentachloroethane	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Pentachloronitrobenzene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Phenacetin	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Phenanthrene	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Phorate	0.00	ppm < 10.2	ppb	1:1	< 10.2				
Pronamide	0.00	ppm < 10.0	ppb	1:1	< 10.0				
Pyrene	0.00	ppm < 10.0	ppb	1:1	< 10.0	12.1%	58.0%		
Pyridine	0.00	ppm < 11.4	ppb	1:1	< 11.4				
Safrole	0.00	ppm < 10.0	ppb	1:1	< 10.0				

Sample: 9207192-05 Client ID: Matrix: GroundH2O Description: FB070792
 Sampled: 07/07/92 Received: 07/09/92 Due: 07/23/92 Priority: 3
 Project: MLRM00191 Manager: WAS

Parameter	Result	Units	CRDL	Units	DF	Surr. %	Blank	RPD	%Rec
Sulfotep	0.00	ppm < 10.0	ppb	1:1		< 10.0			
Thionazin	0.00	ppm < 10.0	ppb	1:1		< 10.0			
Toxaphene	0.00	ppm < 10.0	ppb	1:1		< 10.0	0.00%	N/C	
Tributylphosphate	0.00	ppm < 10.0	ppb	1:1		< 10.0			
a-,a-Dimethylphenethylamine	0.00	ppm < 10.0	ppb	1:1		< 10.0			
alpha-BHC	0.00	ppm < 10.0	ppb	1:1		< 10.0	0.00%	N/C	
beta-BHC	0.00	ppm < 10.0	ppb	1:1		< 10.0	0.00%	N/C	
bis(2-Chloroethoxy)methane	0.00	ppm < 10.0	ppb	1:1		< 10.0			
bis(2-Chloroethyl) ether	0.00	ppm < 10.0	ppb	1:1		< 10.0			
bis(2-Chloroisopropyl)ether	0.00	ppm < 10.0	ppb	1:1		< 10.0	0.00%	N/C	
bis(2-Ethylhexyl)phthalate	0.0112	ppm < 10.0	ppb	1:1		< 10.0			
delta-BHC	0.00	ppm < 10.0	ppb	1:1		< 10.0	0.00%	N/C	
gamma-BHC	0.00	ppm < 17.7	ppb	1:1		< 17.7	0.00%	N/C	
m-Dinitrobenzene	0.00	ppm < 10.0	ppb	1:1		< 10.0			
m-Nitroaniline	0.00	ppm < 30.6	ppb	1:1		< 30.6			
o-Nitroaniline	0.00	ppm < 10.0	ppb	1:1		< 10.0			
o-Toluidine	0.00	ppm < 10.0	ppb	1:1		< 10.0			
p-Dimethylaminoazobenzene	0.00	ppm < 10.0	ppb	1:1		< 10.0			
p-Nitroaniline	0.00	ppm < 26.3	ppb	1:1		< 26.3			
p-Phenylenediamine	0.00	ppm < 10.0	ppb	1:1		< 10.0			
p-Terphenyl-d14	0.0347	ppm 0.00	ppm	1:1	68.0%	0.0540			
sym-Trinitrobenzene	0.00	ppm < 10.0	ppb	1:1		< 10.0			
Total TPH	Method: EPA 418.1				Batch: 17161	Run Analyst: SJ DOA: 07/16/92 TOA: 1500 OK			
Total Petroleum Hydrocarbons	0.200	ppm < 1.00	ppm	1:1		< 1.00 -0.198%	97.6%		



Name: Tony Maria
 Affiliation: McLaren / Hart
 Phone: 908-647-8111
 Address: 25 Independence Blvd., Warren, NJ 07059
 Client/Job No: American Home Products
 Job Name: AHP/Luck's Location: Seagrove, NJ

CHAIN OF CUSTODY RECORD

Sample No.	Lab I.D. No.	Date	Time	Matrix	No.of Cont.	Preser- vatives	Analysis Requested/Remarks
-01	#B-5A-1	7/7/92	9:30	soil	1	cold	B.N. + oil and grease
-02	HB-5C-1	7/7/92	10:25	soil	1	cold	BN + oil and grease
-03	HB-4B-1	7/7/92	5:30	soil	1	cold	BN + oil and grease
-04	HB-3B-1	7/8/92	8:00	soil	1	cold	BN + oil and grease
-05	FB070792	7/7/92	11:40	water	3	cold	2 - BN 1 - oil + grease

Comments: _____

Relinquished by: T. Maria Date: 7/8/92 Shipment Method: Fed.ex
 Time: 11:00 Airbill No: _____

Received by: Rhynne Date: 7-9-92 Relinquished by: _____ Date: _____
 Time: 930 Time: _____

Received by: _____ Date: _____ Relinquished by: _____ Date: _____
 Time: _____ Time: _____

Final Disposition of Samples: _____

Received by: _____ Date: _____ Time: _____

QUANT REPORT

Page 1

Operator ID: BDK
 Output File: ^JJ411::OU
 Data File: >JJ411::D1
 Name: 9207192-04 MLRN A/BN
 Misc: BATCH 17152

Quant Rev: 7 Quant Time: 920716 19:32
 Injected at: 920716 18:48
 Dilution Factor: 1.00000
 Instrument ID: MSD1
 BTL#11

ID File: ID_BN1::DB
 Title: General Engineering BNA Standards
 Last Calibration: 920714 17:16

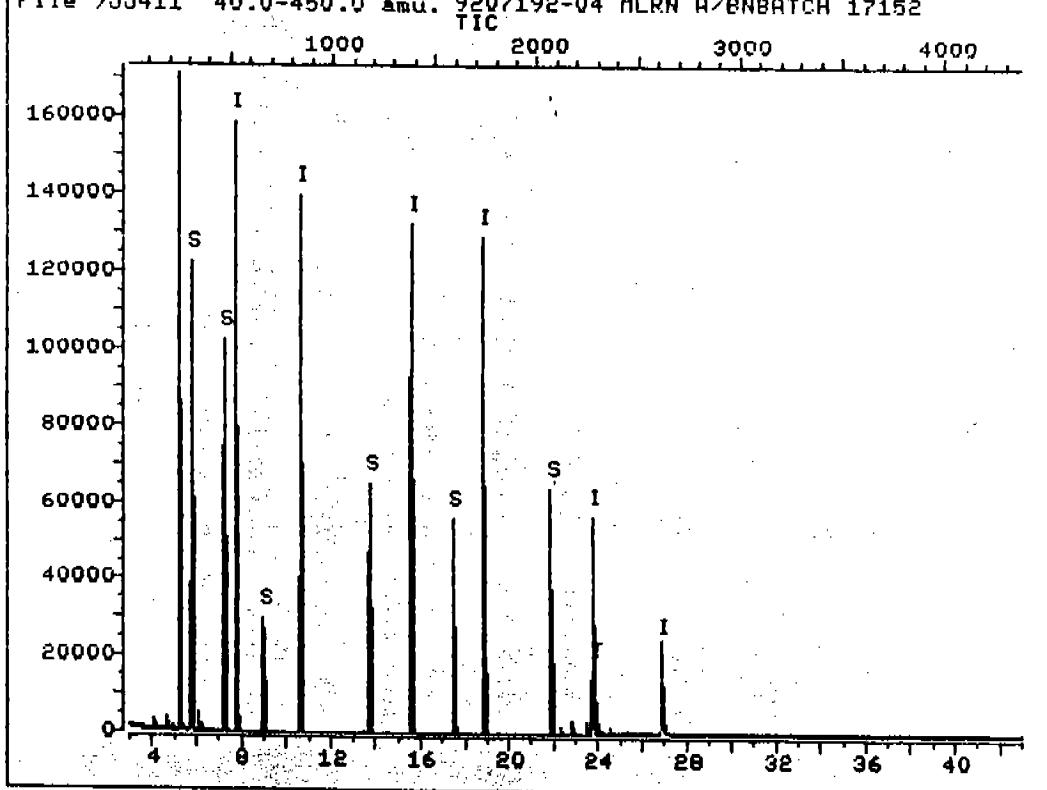
Last Qcal Time: 920716 08:29

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.70	152.0	46272	40.00	ng/uL	88
3)	2-Fluorophenol	5.71	112.0	52167	43.72	ng/uL	86
4)	Phenol-d5	7.18	99.0	64086	48.08	ng/uL	88
17)	*Naphthalene-d8	10.58	136.0	133899	40.00	ng/uL	100
18)	Nitrobenzene-d5	8.91	82.0	16817	18.55	ng/uL	88
32)	*Acenaphthene-d10	15.52	164.0	63013	40.00	ng/uL	86
37)	2-Fluorobiphenyl	13.69	172.0	45389	25.23	ng/uL	96
52)	*Phenanthrene-d10	18.81	188.0	93947	40.00	ng/uL	99
55)	2,4,6-Tribromophenol	17.41	330.0	11340	62.89	ng/uL	86
63)	*Chrysene-d12	23.69	240.0	44308	40.00	ng/uL	99
66)	Terphenyl-d14	21.84	244.0	35631	39.66	ng/uL	90
71)	Bis(2-Ethylhexyl)phthalate	23.79	149.0	7424	6.85	ng/uL	97
72)	*Perylene-d12	26.84	264.0	32619	40.00	ng/uL	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM

File >JJ411 40.0-450.0 amu. 9207192-04 MLRN A/BENBATCH 17152
TIC



Data File: >JJ411::D1

Name: 9207192-04 MLRN A/BN

Misc: BATCH 17152

Quant Output File: ^JJ411::OU

Instrument ID: MSD1

BTL#11

Id File: ID_BN1::DB

Title: General Engineering BNA Standards

Last Calibration: 920714 17:16

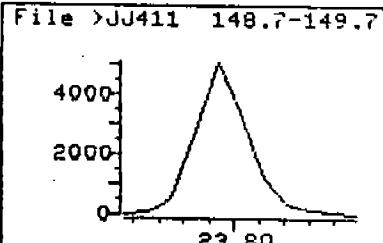
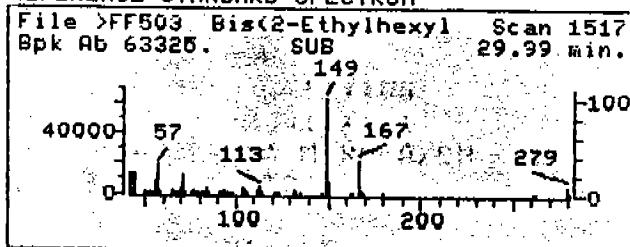
Last Qcal Time: 920716 08:29

Operator ID: BDK

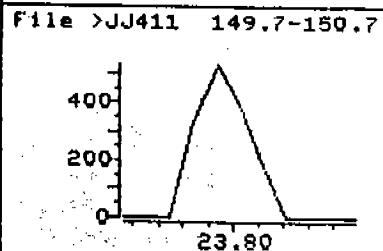
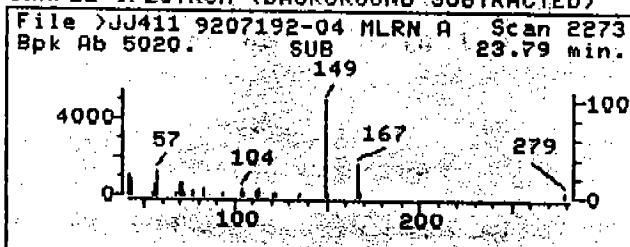
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Injected at: 920716 18:48

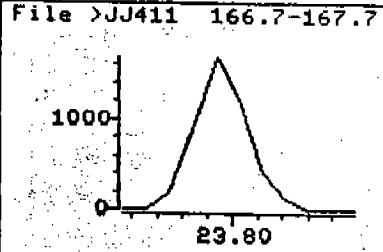
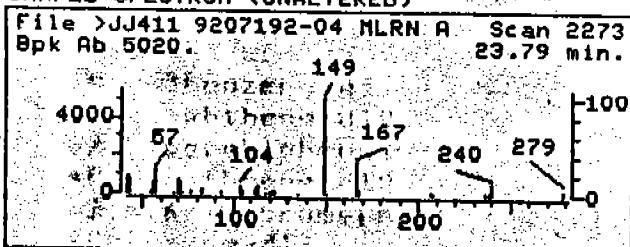
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >JJ411::ID
Name: 9207192-04 MLRN A/BN
Misc: BATCH_17152
Quant Time: 920716 19:32
Injected at: 920716 18:48
Last Qcal Time: 920716 08:29

Quant Output File: ^JJ411::OU
Instrument ID: MSD1

BTL#11

Quant ID File: ID_BN1::DB
Last Calibration: 920714 17:16

Compound No : 71
Compound Name : Bis(2-Ethylhexyl)phthalate
Scan Number : 2273
Retention Time: 23.79 min.
Quant Ion : 149.0
Area : 7424
Concentration : 6.85 ng/uL
q-value : 97

HB-4B-1

QUANT REPORT

Page 1

Operator ID: BDK
 Output File: ^JJ410::OU
 Data File: >JJ410::D1
 Name: 9207192-03 MLRN A/BN
 Misc: BATCH 17152

Quant Rev: 7 Quant Time: 920716 18:40
 Injected at: 920716 17:56
 Dilution Factor: 1.00000
 Instrument ID: MSD1
 BTL#10

ID File: ID_BN1::DB
 Title: General Engineering BNA Standards
 Last Calibration: 920714 17:16

Last Qcal Time: 920716 08:29

	Compound	R.T. Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	7.70 152.0	45043	40.00	ng/uL	88
3)	2-Fluorophenol	5.72 112.0	70521	60.71	ng/uL	84
4)	Phenol-d5	7.18 99.0	79808	61.51	ng/uL	90
17)	*Naphthalene-d8	10.58 136.0	127362	40.00	ng/uL	100
18)	Nitrobenzene-d5	8.91 82.0	26166	30.35	ng/uL	88
32)	*Acenaphthene-d10	15.52 164.0	61836	40.00	ng/uL	86
37)	2-Fluorobiphenyl	13.69 172.0	60961	34.53	ng/uL	94
52)	*Phenanthrene-d10	18.80 188.0	87100	40.00	ng/uL	99
55)	2,4,6-Tribromophenol	17.41 330.0	10596	63.38	ng/uL	89
63)	*Chrysene-d12	23.69 240.0	33504	40.00	ng/uL	99
66)	Terphenyl-d14	21.84 244.0	29511	43.44	ng/uL	92
71)	Bis(2-Ethylhexyl)phthalate	23.80 149.0	15585	19.02	ng/uL	95
72)	*Perylene-d12	26.85 264.0	23080	40.00	ng/uL	96

* Compound is ISTD

TOTAL ION CHROMATOGRAM

File >JJ410 40.0-450.0 amu. 9207192-03 MLRN A/BNBATCH 17152

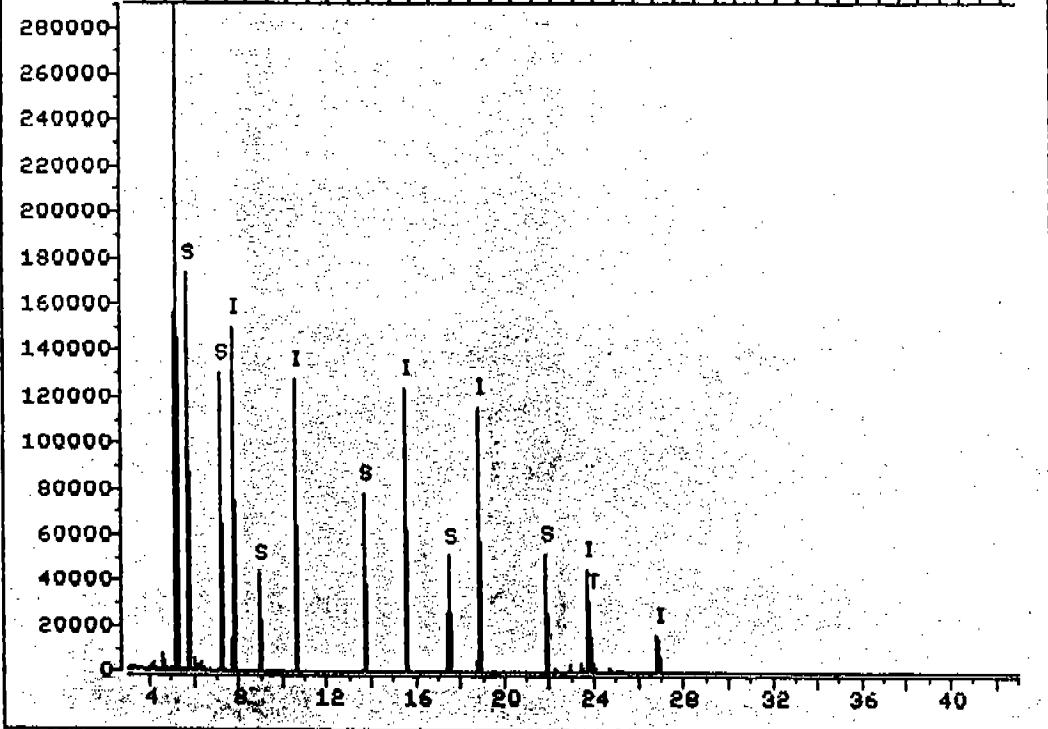
TIC

1000

2000

3000

4000



Data File: >JJ410::D1

Name: 9207192-03 MLRN A/BN

Misc: BATCH 17152

Quant Output File: ^JJ410::OU

Instrument ID: MSD1

BTL#10

Id File: ID_BN1::DB

Title: General Engineering BNA Standards

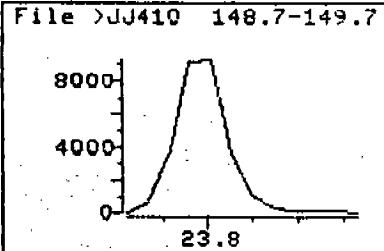
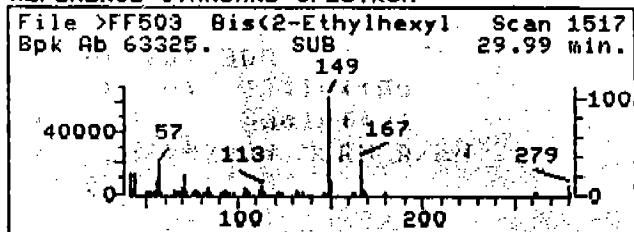
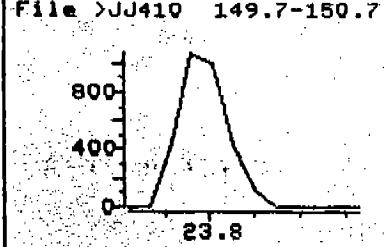
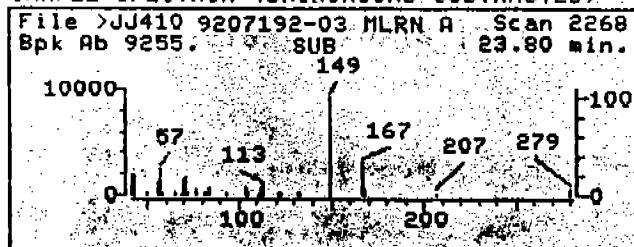
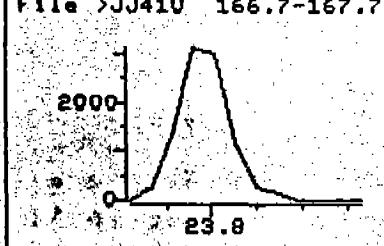
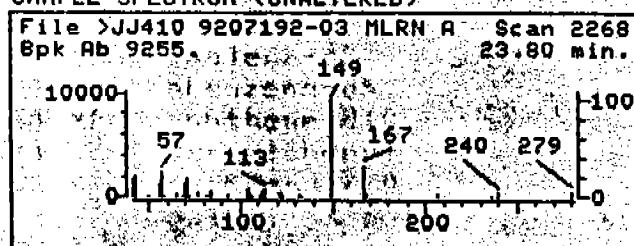
Last Calibration: 920714 17:16

Last Qcal Time: 920716 08:29

Operator ID: BDK

Quant Time: 920716 18:40

Injected at: 920716 17:56

REFERENCE STANDARD SPECTRUM**SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)****SAMPLE SPECTRUM (UNALTERED)**

Data File: >JJ410::01
Name: 9207192-03 MLRN A/BN
Misc: BATCH 17152
Quant Time: 920716 18:40
Injected at: 920716 17:56
Last Qcal Time: 920716 08:29

Quant Output File: >JJ410::0U
Instrument ID: MSD1
BTL#10
Quant ID File: ID_BN1::DB
Last Calibration: 920714 17:16

Compound No : 71
Compound Name : Bis(2-Ethylhexyl)phthalate
Scan Number : 2268
Retention Time: 23.80 min.
Quant Ion : 149.0
Area : 15585
Concentration : 19.02 ng/uL
q-value : 95